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ABSTRACT

The Elementary and Secondary Education Act Title I projects operated in the Bureau of Indian Affairs (BIA), Phoenix Area, during fiscal year 1974 are summarized in this evaluation report on a grade by grade-school by school basis. Data, presented in chart and graph form, cover: the BIA's organization; student enrollment in the Phoenix Area; expenditures by school; student participation by component and school; professional and paraprofessional staff; parent council involvement; and student achievement in reading, language, mathematics, science, and special education. The data presented in this report show that most of the Title I projects were highly successful in fiscal year 1974. Students in 8 of the 11 grades gained at or above the national average in reading and math. Special education students in 10 of the 11 grades had gains higher than expected without Title I; and in 2 grades, the gains were higher than the national average for nonspecial education students. (NQ)

ED106033

REPORT OF FINAL EVALUATION
ESEA TITLE I PROJECTS
FISCAL YEAR 1974

FINAL REPORT

U.S. DEPARTMENT OF THE INTERIOR
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ACKNOWLEDGEMENT

Although the success of Title I programs in the Phoenix Area has involved the efforts of many people, my thanks must first go to the teachers and their aides who have given the most—their talents, hard work, and skills in providing the highest *quality* of education to Indian students. To each teacher and aide the credit must be given to you for the gains made by each student.

To the people in the support branches of Personnel, Property and Supply, Budget, and Plant Management, I wish to extend my sincere appreciation for your assistance.

Our gratitude is also extended to the school and agency administrators, Parent Advisory Councils, Title I Coordinators, administrative and clerical staff who have worked in the planning, writing and typing of proposals, and in keeping the projects operational.

The entire staff at Salt River Day School are to be commended for their successful total school curriculum modification. The success of this modification has provided the impetus for major curriculum change in many of the other Phoenix Area schools.

Harriet B. Hilburn
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TABLE OF CONTENTS

	Page
Introduction	iv
Overview and Organization of the Bureau of Indian Affairs	1
Enrollment in the Phoenix Area	4
Expenditures/school	5
Student Participation by Component and School	6
Professional and Paraprofessional Staff	7
Parent Council Involvement	12
Student Achievement:	
Reading	13
Language	34
Mathematics	41
Science	60
Special Education	63
Conclusions and Recommendations	82
Definition of Terms	84

0005

INTRODUCTION

This evaluation report addresses itself to a summary of projects operated in the Bureau of Indian Affairs, Phoenix Area, during fiscal 1974. As with last year's report, this one is presented in chart and graph form rather than in narrative form.

Again the Phoenix Area is publishing two evaluation reports. One for general distribution is a composite summary of the data into an area-wide report. The second is an individual school report that presents the data on a grade by grade-school by school basis. The school report is primarily meant for distribution to the Phoenix Area schools; however, copies are available for dissemination.

For further information relative to evaluation of the Title I programs, please contact:

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In each of the 23 schools of the Phoenix Area, there are a variety of programs used for any given area of instruction. Each teacher uses the programs she feels will work best for the students she has in any given class. Thus, to attempt to describe anything other than the process used would be an impossible and meaningless task.

This process remains fairly constant across grades, schools, and subject matter. However, some teachers use it to a more exacting degree than others. The process is one of diagnosis of specific skill deficiencies, use of whatever *appropriate* materials are available for remediation of skill deficiencies, and a retest for mastery of the skill.

A number of the schools have now begun the sophisticated process of identifying skills that must be mastered at each grade from K-12. They are using this hierarchy as a basis for developing instructional materials and mastery tests that can be used in the instructional process to better meet the needs of the students. Once this has been accomplished, there will be an orderly sequential set of materials that can be used from K-12.

The results of using the diagnostic-prescriptive approach in the Phoenix Area Title I projects have demonstrated such a high degree of success that now several schools are beginning to use this process for all students.

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OVERVIEW AND ORGANIZATION OF THE BUREAU OF INDIAN AFFAIRS

The Bureau of Indian Affairs was recently reorganized (See Figure 1).

The Phoenix Area Office exercises jurisdiction over Bureau of Indian Affairs schools in a three state region. Figure 2 shows the geographical location of schools in the Phoenix Area. The twenty-one Bureau schools are situated in a three-state region comprised of Arizona, California and Nevada. With the exception of two off-reservation high schools, all are located in Arizona. The two exceptions are Sherman Indian High School in Riverside, California and Stewart Indian High School in Stewart, Nevada. Phoenix Indian High School, the Area's third boarding high school, is located in the heart of Phoenix, Arizona. Additionally, Duckwater Shoshone Elementary School in Nevada is served by Title I but it is not under regular programs jurisdiction.

Located in the White Mountains of eastern Arizona are the John F. Kennedy Day School, Cibecue Day School, and Theodore Roosevelt Boarding School. To the north, approximately 180 miles are the Hopi mesas and the six schools which serve the Hopi children. A mule trip is necessary to reach the Havasupai village, where the Supai Day School is located near the Grand Canyon. Farther south near the Mexico-Arizona border in the Sonoran Desert, is the Santa Rosa Boarding School and three small day schools on the Papago Reservation. Approximately 30 miles south of Phoenix on the Gila River Reservation are the two Pima Bureau day schools, one small tribal operated school and one mission school. Also, located near metropolitan Phoenix is the Salt River Reservation which contains one day school.

Figure 1
Organization—Bureau of Indian Affairs

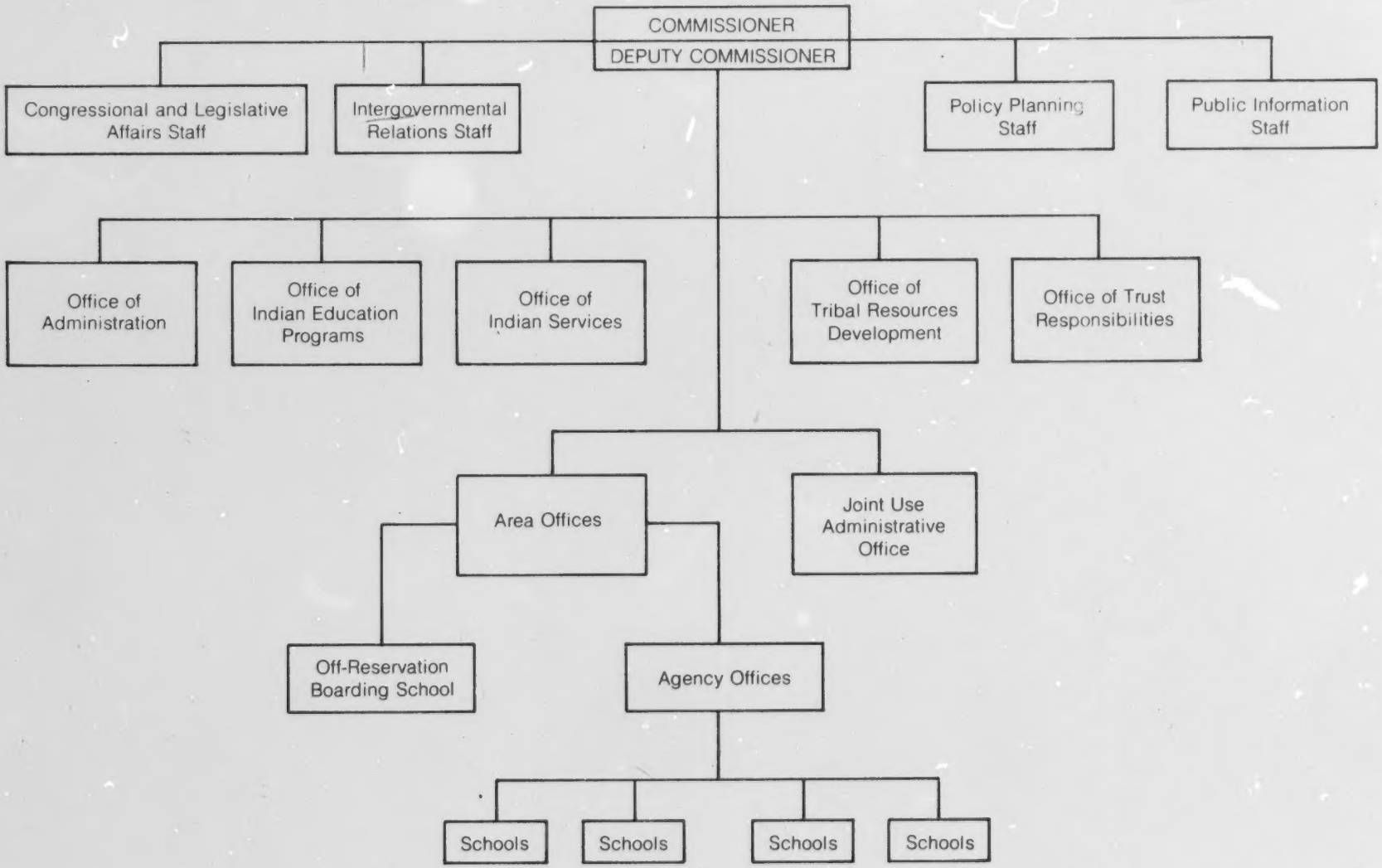

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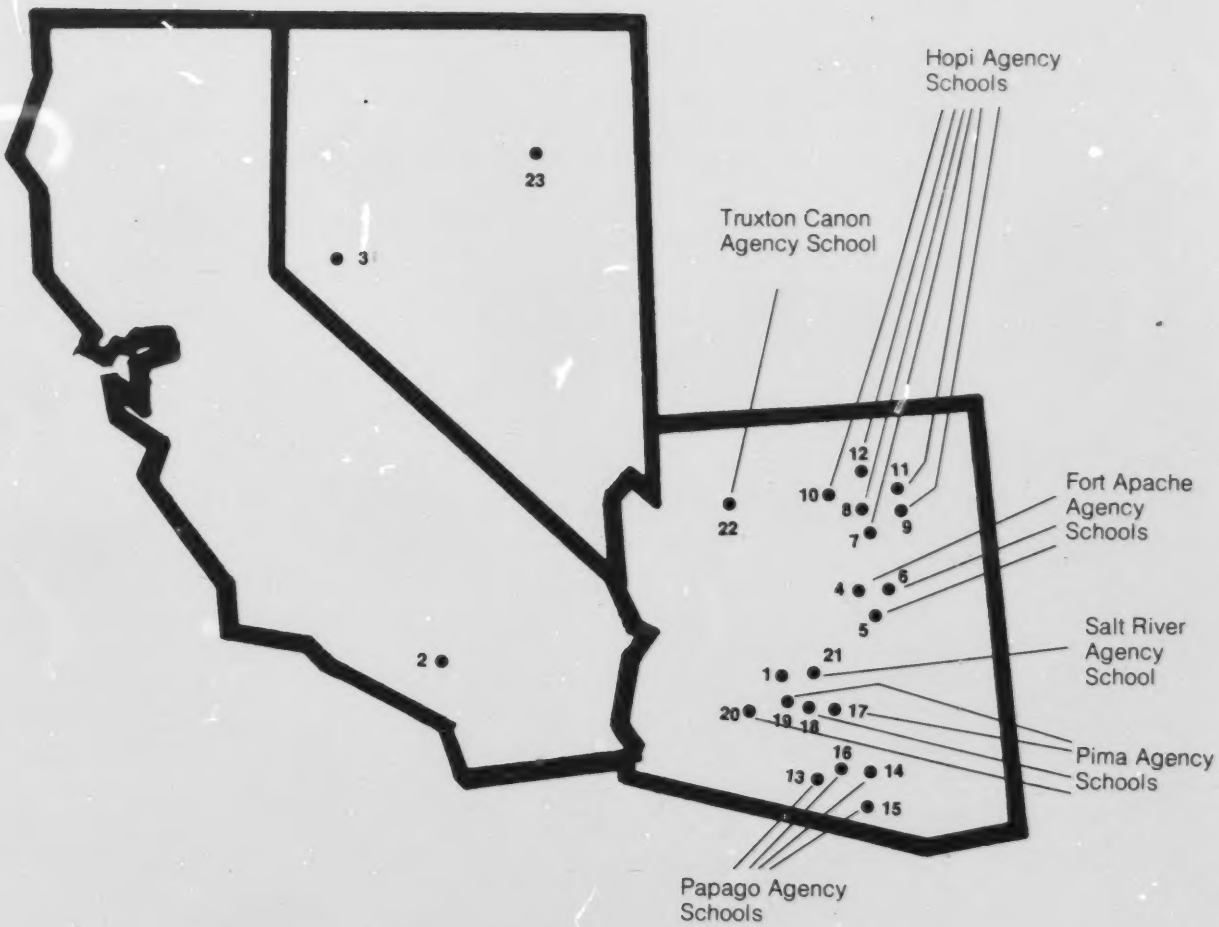
Figure 2
Phoenix Area Schools



1. Phoenix Indian High School
2. Sherman indian High School
3. Stewart Indian High School
4. Cibecue Day School
5. John F. Kennedy Day School
6. Theodore Roosevelt Boarding School
7. Hopi Day School
8. Hotevilla Day School
9. Keams Canyon Boarding School
10. Moencopi Day School
11. Polacca Day School
12. Second Mesa Day School
13. Kerwo Day School
14. Santa Rosa Boarding School
15. Santa Rosa Ranch Day School
16. Vaya Chin Day School
17. Blackwater Demonstration School
18. Casa Blanca Day School
19. Gila Crossing Day School
20. St. John's Mission School
21. Salt River Day School
22. Supai Day School
23. Duckwater

0009

Table 1
Enrollment in the Phoenix Area Schools by Agency and School for School Year 1973—74

Agency & School	Grades Served	Number of Students
ELEMENTARY SCHOOLS		
Duckwater	1-8	22
Fort Apache Agency		
Cibecue Day School	K-8	292
Theodore Roosevelt Brdg.	5-8	218
John F. Kennedy Day	1-6	112
Hopi Agency		
Hopi Day School	1-8	146
Hotevilla Day School	1-6	87
Keams Canyon Brdg/Day	B-8	402
Moencopi Day School	1-4	64
Polacca Day School	K-6	160
Second Mesa Day School	K-6	257
Papago Agency		
Kerwo Day School	B-4	46
Santa Rosa Boarding/Day	B-8	424
Santa Rosa Ranch Day	B-5	21
Vaya Chin Day School	B-4	71
Pima Agency		
Blackwater Demonstration*	K-1	39
Casa Blanca Day School	K-4	149
Gila Crossing Day School	K-5	171
St. John's Indian School**	1-12	210
Salt River Agency		
Salt River Day School	K-6	243
Truxton Canon Agency		
Supai Day School	B-4	42
HIGH SCHOOLS* **		
Phoenix Indian High School	7-12	766
Sherman Indian High School	9-12	726
Stewart Indian High School	8-12	499

* = *Contracted to Community*
** = *Catholic Mission School*
*** = *Off-Reservation Schools*

Table 2
Expenditures/School

School	Instructional Components						Supportive Components			
	Reading	Bilingual/ Language	Math	Special Education	Total Academic	Science	Dissemination	Administration	Parent Council Cost	Totals
Polacca Day School	18,509		36,035							54,544
Keams Canyon Brdg. Sch.	119,483		20,973	25,981				43,042		209,479
Moencopi Day School	27,400						97			27,497
Second Mesa Day Sch.	47,338		20,419							67,757
Hotevilla Day School	27,305		15,084			6,527				48,916
Hopi Day School	41,455									41,455
Cibecue Day School	34,925	33,988		29,012						97,925
Theodore Roosevelt Boarding School	73,511			24,191				7,987	1,442	107,131
John F. Kennedy Day Sch.	52,409									52,409
Kerwo Day School	15,372	45,888	5,061						492	66,813
Santa Rosa Brdg. School	88,397	28,835							39	117,271
Santa Rosa Ranch Sch.	16,921		5,425	20,404					138	42,888
Vaya Chin Day School	17,591		3,961				802	33,112	335	55,801
Blackwater Day School	12,804						162			12,966
Casa Blanca Day School	40,225		12,769	26,624			162	24,851		104,631
Gila Crossing Day School	25,564		12,616				165			38,345
St. John's Elem.	29,141		12,803				219			42,163
Salt River Day School	55,379	40,457	29,104			31,337		7,426		163,703
Supai Day School	26,115							1,322		27,437
Phoenix Indian School				20,056	169,738		300	12,122	335	202,551
Sherman Indian School	47,192		14,334	28,910				7,765	1,709	99,970
Stewart Indian School	40,155		42,286	19,9				6,532	931	109,842
Phoenix Area Office								131,510		131,510
Hopi Follow Through										
St. John's High	25,543		3,836				130			29,509
Duckwater	11,030		3,775					402		15,207
Hopi Day/Second Mesa				26,192						26,192
Totals	**893,764**	**120,333**	**267,316**	**221,308**	**169,738**	**37,864**	**2,037**	**276,071**	**5,481**	**1,993,912**

Table 3
Student Participation by Component and School

School	Reading		Language		Mathematics		Special Education		Science	
	Grades	No. of Students	Grades	No. of Students	Grades	No. of Students	Grades	No. of Students	Grades	No. of Students
Keams Canyon Brdg. Sch.	1-8	253			6-8	116	2-7	25		
Moencopi Day School										
Hopi Day School	5-8	63								
Hotevilla Day School	1-6	54			4-6	29			4-6	34
Second Mesa Day School	4-6	69			4-6	56				
Polacca Day School	4-6	60			4-6	46				
Cibecue Day School	5-8	102	K-4	159			K-3	30		
John F. Kennedy Day Sch.	1-6	68								
Theodore Roosevelt Sch.	5-8	200					5-8	30		
Salt River Day School	K-6	240	K-6	240	K-6	240			K-6	240
Supai Day School	1-4	42								
Phoenix Indian High Sch.	7-9	240	7-9	240	7-9	240	7-12	40	7-9	240
Sherman Indian High Sch.	9-12	289			9-12	100	9-12	50		
Stewart Indian High Sch.	8-12	128			8-12	165	7-12	30		
St. John's High School	9-12	48			9	30				
St. John's Elementary School	1-7	50			1-7	37				
Blackwater School	1	20								
Casa Blanca Day School	1-4	30			1-4	30	K-4	20		
Gila Crossing Day School	1-5	69			1-5	47				
Vaya Chin Day School	B-4	71			B-4	47				
Kerwo Day School	1-4	31	B-3	25	1-2, 4	31				
Santa Rosa Ranch Day Sch.	2-5	12			2-5	12	2-5	38		
Santa Rosa Boarding Sch.	1-8	204			1-8	282				
Duckwater School	1-8	22			1-8	22				
Hopi Day/Second Mesa							2-7	30		

0012

Table 4
Number of Professional and Para-Professional Staff for the Reading Components

School	Professional		Para-Professional	
	Regular Program	Title 1	Regular Program	Title 1
Blackwater School	1 teacher		1 aide	1 aide
Casa Blanca Day School	1 teacher	2 teachers		2 aides
Cibecue Day School	8 teachers	2 teachers		2 aides
Gila Crossing Day School	6 teachers	3 teachers		3 aides
Hopi Day School	5 teachers	1 teacher		4 aides
Hotevilla Day School	3 teachers	1 teacher		2 aides
John F. Kennedy Day Sch.	5 teachers	1 teacher		4 aides
Keams Canyon Brdg. Sch.	6 teachers	2 teachers		8 aides
Kerwo Day School	2 teachers	1 teacher		4 aides
Moencopi Day School		1 teacher		1 aide
Phoenix Indian High Sch.	5 teachers	1 teacher		7 aides
Polacca Day School	1 teacher			2 aides
St. John's Elementary Sch.	1 teacher	2 teachers		2 aides
St. John's High School		2 teachers		1 aide
Salt River Day School	11 teachers	3 teachers	2 aides	5 aides
Santa Rosa Brdg. Sch.	5 teachers	2 teachers		8 aides
Santa Rosa Ranch Sch.	1 teacher			1 aide
Second Mesa Day Sch.		2 teachers		2 aides
Sherman Indian High Sch.	2 teachers	1 teacher		4 aides
Stewart Indian High Sch.		2 teachers		3 aides
Supai Day School	2 teachers	1 teacher	1 aide	1 aide
Theodore Roosevelt Sch.	9 teachers	2 teachers		4 aides
Vaya Chin Day School	3 teachers	2 teachers		3 aides
Duckwater School	2 teachers		2 aides	

0013

Table 5
Number of Professional and Para-Professional Staff for the Oral Language Components

School	Professional		Para-Professional	
	Regular Program	Title 1	Regular Program	Title 1
Blackwater School				
Casa Blanca Day School				
Cibecue Day School	10 teachers	1 teacher		3 aides
Gila Crossing Day School				
Hopi Day School				
Hotevilla Day School				
John F. Kennedy Day Sch.				
Keams Canyon Brdg. Sch.				
Kerwo Day School		1 teacher		2 aides
Moencopi Day School				
Phoenix Indian High Sch.				
Polacca Day School				
St. John's Elementary Sch.				
St. John's High School				
Salt River Day School	2 teachers	2 teachers	1 aide	3 aides
Santa Rosa Brdg. Sch.				
Santa Rosa Ranch Sch.				
Second Mesa Day Sch.				
Sherman Indian High Sch.				
Stewart Indian High Sch.				
Supai Day School				
Theodore Roosevelt Sch.				
Vaya Chin Day School				

0014

Table 6
Number of Professional and Para-Professional Staff for the Math Components

School	Professional		Para-Professional	
	Regular Program	Title 1	Regular Program	Title 1
Blackwater School				
Casa Blanca Day School	1 teacher	1 teacher		1 aide
Cibecue Day School				
Gila Crossing Day School	1 teacher	1 teacher		1 aide
Hopi Day School				
Hotevilla Day School		1 teacher		1 aide
John F. Kennedy Day Sch.				
Keams Canyon Brdg. Sch.	1 teacher			2 aides
Kerwo Day School		1 teacher		1 aide
Moencopi Day School				
Phoenix Indian High Sch.	3 teachers	1 teacher		2 aides
Polacca Day School	1 teacher			1 aide
St. John's Elementary Sch.	1 teacher	1 teacher		2 aides
St. John's High School	1 teacher			
Salt River Day School		3 teachers		
Santa Rosa Brdg. Sch.	8 teachers	1 teacher		1 aide
Santa Rosa Ranch Sch.	1 teacher			
Second Mesa Day Sch.		1 teacher		1 aide
Sherman Indian High Sch.		1 teacher		1 aide
Stewart Indian High Sch.	2 teachers	1 teacher		3 aides
Supai Day School				
Theodore Roosevelt Sch.				1 aide
Vaya Chin Day School		1 teacher		1 aide
Duckwater School	2 teachers		2 aides	

0015

Table 7
Number of Professional and Para-Professional Staff for the Special Education Components

School	Professional		Para-Professional	
	Regular Program	Title 1	Regular Program	Title 1
Blackwater School				
Casa Blanca Day School		1 teacher		1 aide
Cibecue Day School		1 teacher		1 aide
Gila Crossing Day School				
Hopi Day School/Second Mesa		1 teacher		1 aide
Hotevilla Day School				
John F. Kennedy Day Sch.				
Keams Canyon Brdg. Sch.		1 teacher		1 aide
Kerwo Day School				
Moencopi Day School				
Phoenix Indian High Sch.	1 teacher	1 teacher		1 aide
Polacca Day School				
St. John's Elementary Sch.				
St. John's High School				
Salt River Day School				
Santa Rosa Brdg. Sch.				
Santa Rosa Ranch Sch.		1 teacher		1 aide
Second Mesa Day Sch.				
Sherman Indian High Sch.		2 teachers		2 aides
Stewart Indian High Sch.	1 teacher	1 teacher		1 aide
Supai Day School				
Theodore Roosevelt Sch.		1 teacher		1 aide
Vaya Chin Day School				

0016

Table 8
Number of Professional and Para-Professional Staff for the Science Components

School	Professional		Para-Professional	
	Regular Program	Title 1	Regular Program	Title 1
Blackwater School				
Casa Blanca Day School				
Cibecue Day School				
Gila Crossing Day School				
Hopi Day School				
Hotevilla Day School		1 teacher		1 aide
John F. Kennedy Day Sch.				
Keams Canyon Brdg. Sch.				
Kerwo Day School				
Moencopi Day School				
Phoenix Indian High Sch.	1 teacher	1 teacher		2 aides
Polacca Day School				
St. John's Elementary Sch.				
St. John's High School				
Salt River Day School	2 teachers	3 teachers	1 aide	3 aides
Santa Rosa Brdg. Sch.				
Santa Rosa Ranch Sch.				
Second Mesa Day Sch.				
Sherman Indian High Sch.				
Stewart Indian High Sch.				
Supai Day School				
Theodore Roosevelt Sch.				
Vaya Chin Day School				

0017

Table 9
Parent Council Involvement

School	Number of Members	Number of Meetings	Average Attendance
Cibecue Day School	6	6	4
John F. Kennedy Day School	5	8	4
Theodore Roosevelt Brdg.	6	4	5
Stewart Indian High School	10	3	7
Sherman Indian High School	10	3	5
Phoenix Indian High School	13	3	6
Supai Day School	12	10	7
Hotevilla Day School	17	5	7
Moencopi Day School	5	9	5
Second Mesa Day School	10	5	6
Casa Blanca Day School	5	5	3
Gila Crossing Day School	7	9	4
Blackwater Demonstration	4	4	3
St. John's Indian School	6	8	4
Vaya Chin Day School	9	9	6
Kerwo Day School	10	10	10
Santa Rosa Ranch Day School	6	9	5
Santa Rosa Boarding School	14	2	6
Salt River Day School	12	3	8
Polacca Day School	7	9	5
Keams Canyon Boarding—Day School	9	4	6
Hopi Day School	8	7	5

0018

Table 10
First Grade Reading Results

School	N	Post Test
St. John's Elementary	6	1.5
Gila Crossing	32	1.5
Casa Blanca	11	.8
John F. Kennedy	13	.9
Supai	9	1.8

0019

Figure 3
Pre-Post California Achievement Test Total Reading Grade Equivalent Scores for all Schools with a Second Grade Reading Program

0020

Table 11
2nd Grade
Reading Component

School	Actual Gain Scores	Expected Gain Scores	Difference
Moencopi Day School	+1.3	.4	+.9
Hotevilla School	+ .5	.6	−.1
Kerwo Day School	+ .7	.6	+.1
Santa Rosa Boarding School	+ .4	.3	+.1
Santa Rosa Ranch School	+ .4	.6	−.2
Vaya Chin School	+ .8	.4	+.4
Salt River Day School	+ .9	.5	+.4
John F. Kennedy Day School	+ .8	.6	+.2
St. John's Indian School	+1.0	.3	+.7
Gila Crossing Day School	+ .2	.2	0
Casa Blanca Day School	+1.1	.5	+.6
Supai Day School	+1.0	.6	+.4

0021

Figure 4
Pre-Post California Achievement Test Total Reading Grade Equivalent Scores for all Schools with a Third Grade Reading Program

0022

Table 12
3rd Grade
Reading Component

School	Actual Gain Scores	Expected Gain Scores	Difference
Moencopi Day School	+1.2	.5	+ .7
Hotevilla School	+1.1	.5	+ .6
Kerwo Day School	+1.5	.5	+1.0
Santa Rosa Boarding School	+ .6	.4	+ .2
Santa Rosa Ranch School	+1.2	.2	+1.0
Vaya Chin School	+1.2	.4	+ .8
Salt River Day School	+1.0	.4	+ .6
John F. Kennedy Day School	+ .5	.4	+ .1
St. John's Indian School	+ .9	.4	+ .5
Gila Crossing Day School	0	.3	− .3
Casa Blanca Day School	+ .9	.3	+ .6
Supai Day School	+ .7	.5	+ .2

0023

Figure 5
Pre-Post California Achievement Test Total Reading Grade Equivalent Scores for all Schools with a 4th Grade Reading Program

0024

Table 13
4th Grade
Reading Component

School	Actual Gain Scores	Expected Gain Scores	Difference
Moencopi Day School	+ .4	.6	− .2
Keams Canyon Boarding School	+ .1	.5	− .4
Hopi Day School	+ .9	.5	+ .4
Second Mesa Day School	+1.2	.2	+1.0
Polacca Day School	+1.0	.5	+ .5
Hotevilla Day School	+ .8	.5	+ .3
Santa Rosa Boarding School	+ .6	.4	+ .2
Santa Rosa Ranch School	+ .7	.5	+ .2
Salt River Day School	+1.6	.5	+1.1
John F. Kennedy Day School	+ .6	.4	+ .2
St. John's Indian School	+1.2	.5	+ .7
Gila Crossing Day School	+ .3	.4	− .1
Casa Blanca Day School	0	.4	− .4
Supai Day School	+ .5	.5	0

0025

Figure 6
Pre-Post California Achievement Test Total Reading Grade Equivalent Scores for all Schools with a 5th Grade Reading Program

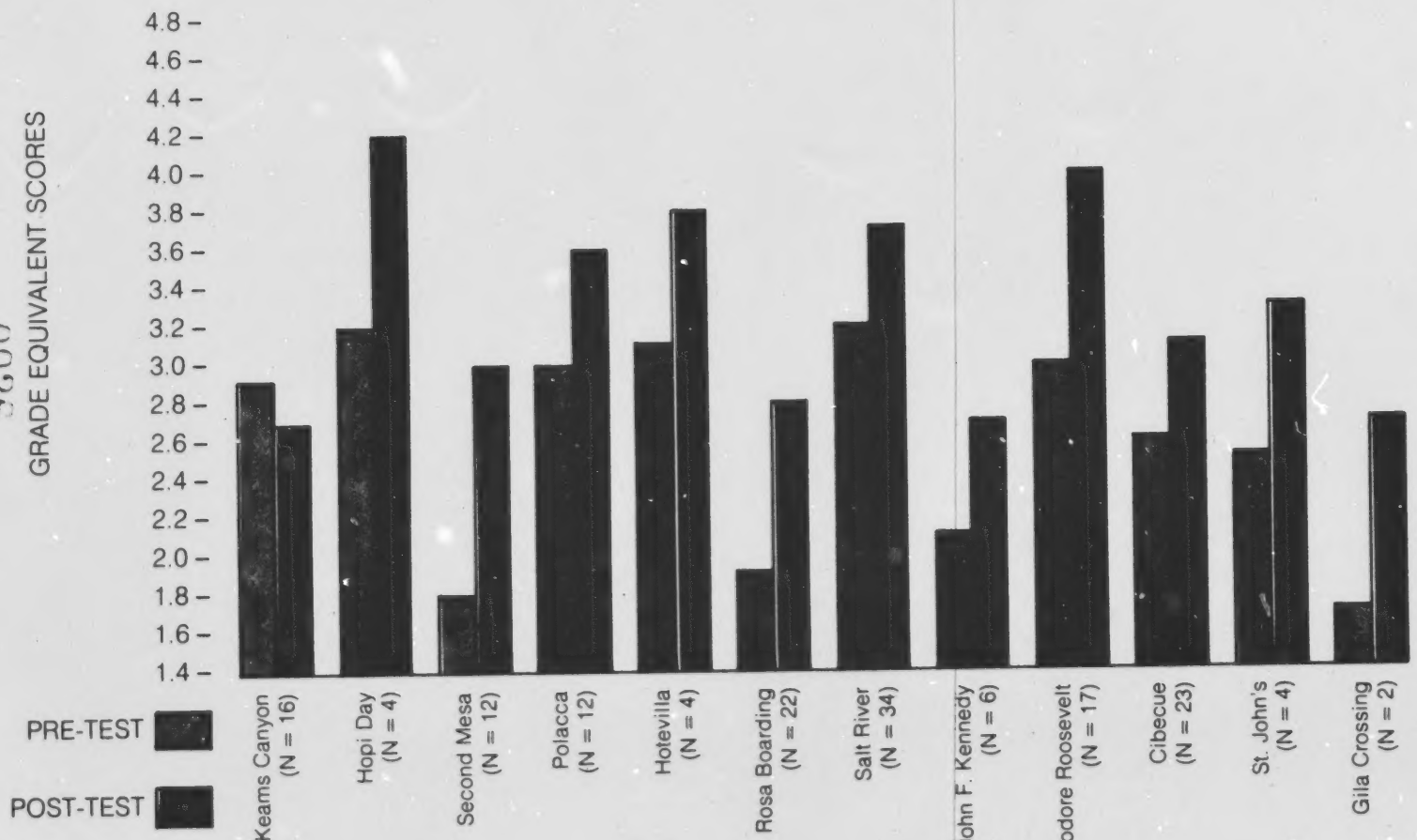


Table 14
5th Grade
Reading Component

School	Actual Gain Scores	Expected Gain Scores	Difference
Keams Canyon Boarding School	− .2	.5	−.7
Hopi Day	+1.0	.5	+.5
Second Mesa Day School	+1.2	.3	+.9
Polacca Day School	+ .6	.5	+.1
Hotevilla Day School	+ .7	.5	+.2
Santa Rosa Boarding School	+ .9	.3	+.6
Salt River Day School	+ .5	.5	0
John F. Kennedy Day School	+ .6	.3	+.3
Theodore Roosevelt School	+1.0	.5	+.5
Cibecue Day School	+ .5	.4	+.1
St. John's Indian School	+ .8	.4	+.4
Gila Crossing Day School	+1.0	.2	+.8

1200 0021

Figure 7
Pre-Post California Achievement Test Total Reading Grade Equivalent Scores for all Schools with a 6th Grade Reading Program

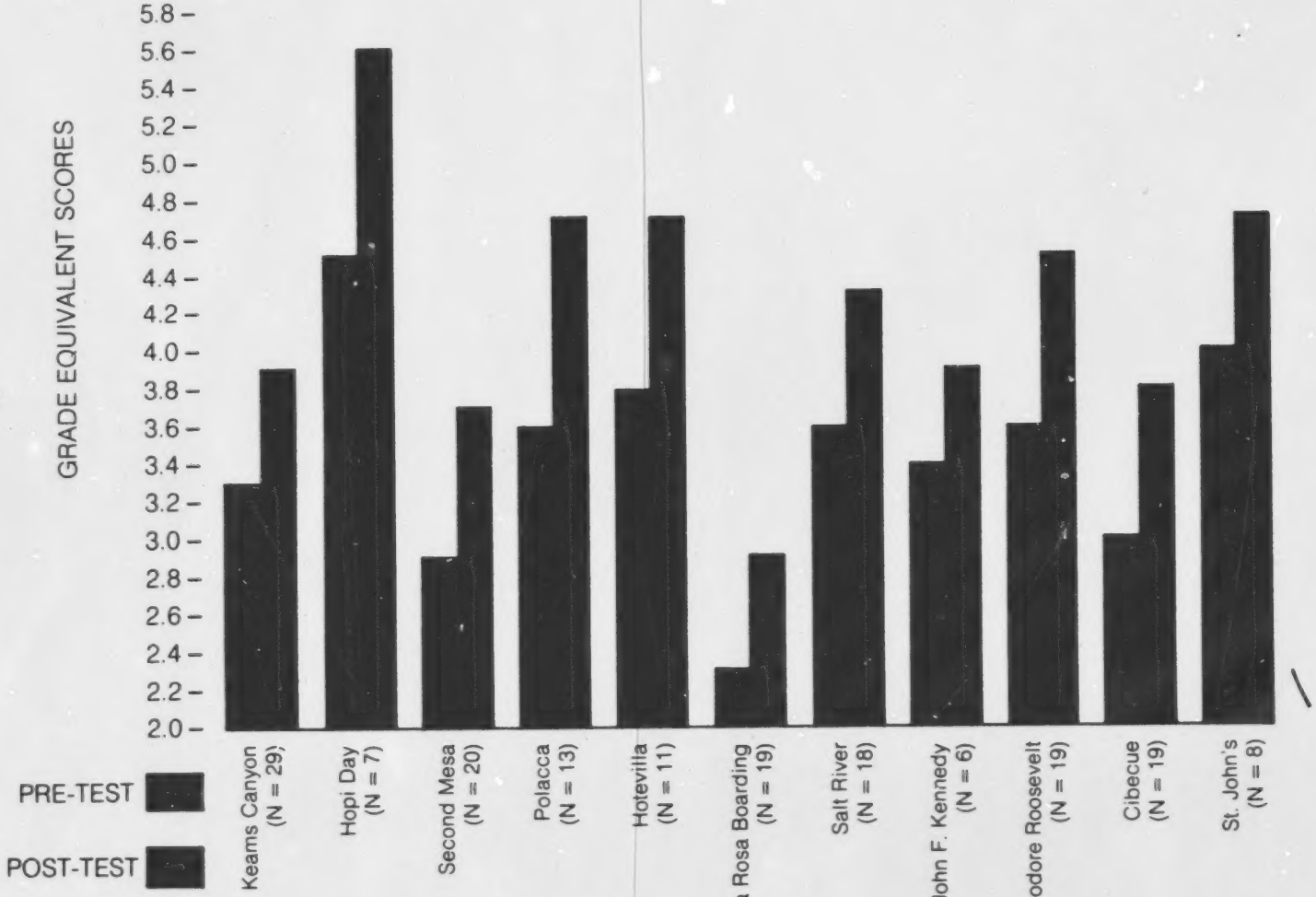


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Table 15
6th Grade
Reading Component

School	Actual Gain Scores	Expected Gain Scores	Difference
Keams Canyon Boarding Sch.	+ .6	.5	+.1
Hopi Day School	+1.1	.6	+.4
Second Mesa Day School	+ .8	.4	+.4
Polacca Day School	+1.1	.5	+.6
Hotevilla Day School	+ .9	.5	+.4
Santa Rosa Boarding School	+ .6	.3	+.3
Salt River Day School	+ .7	.5	+.2
John F. Kennedy Day School	+ .5	.5	0
Theodore Roosevelt School	+ .9	.5	+.4
Cibecue Day School	+ .8	.4	+.4
St. John's Indian School	+ .7	.6	+.1

0029

Figure 8
Pre-Post California Achievement Test Total Reading Grade Equivalent Scores for all Schools with a 7th Grade Reading Program

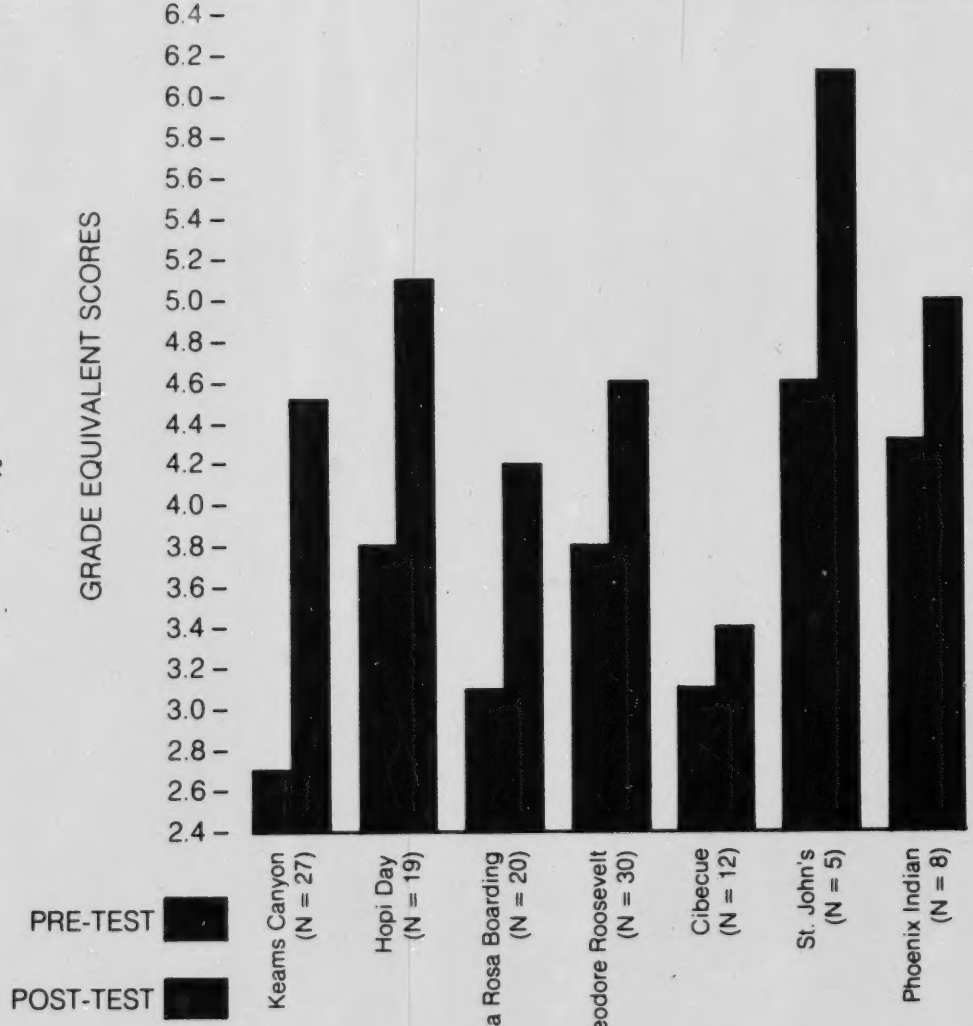


Table 16
7th Grade
Reading Component

School	Actual Gain Scores	Expected Gain Scores	Difference
Keams Canyon Boarding Sch.	+1.8	.3	+1.5
Hopi Day School	+1.3	.4	+ .9
Santa Rosa Boarding School	+1.1	.3	+ .8
Theodore Roosevelt School	+ .8	.4	+ .4
Cibecue Day School	+ .3	.3	0
St. John's Indian School	+1.5	.6	+ .9
Phoenix Indian School	+ .7	.5	+ .2

0051

Figure 9
Pre-Post California Achievement Test Total Reading Grade Equivalent Scores for all Schools with a 8th Grade Reading Program

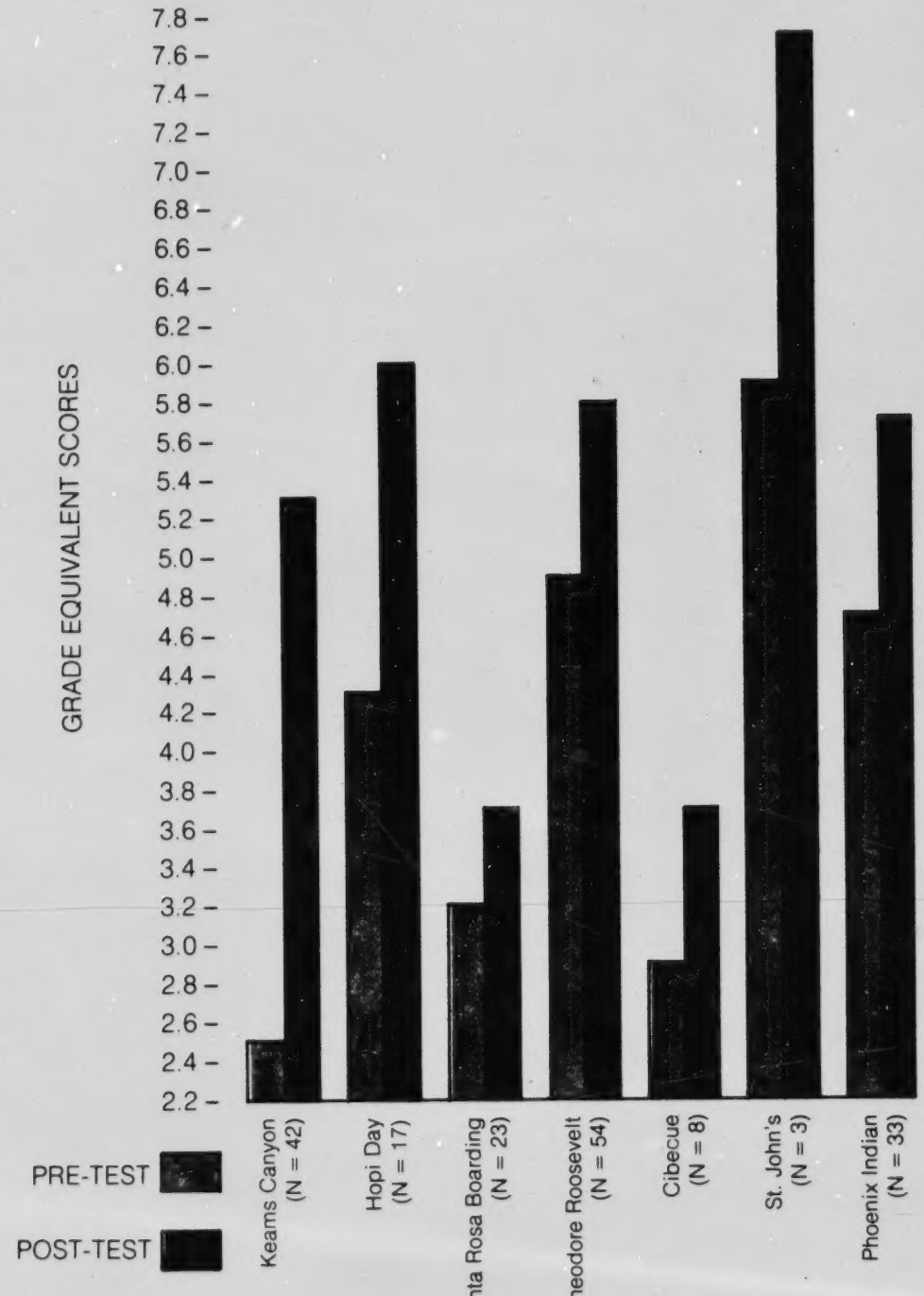


Table 17
8th Grade
Reading Component

School	Actual Gain Scores	Expected Gain Scores	Difference
Keams Canyon Boarding Sch.	+2.8	.2	+2.6
Hopi Day School	+1.7	.4	+1.3
Santa Rosa Boarding School	+ .5	.3	+ .2
Theodore Roosevelt School	+ .9	.5	+ .4
Cibecue Day School	+ .8	.3	+ .5
St. John's Indian School	+1.8	.6	+1.2
Phoenix Indian School	+1.0	.5	+ .5

0033

Figure 10
Pre-Post California Achievement Test Total Reading Grade Equivalent Scores for all Schools with a 9th Grade Reading Program

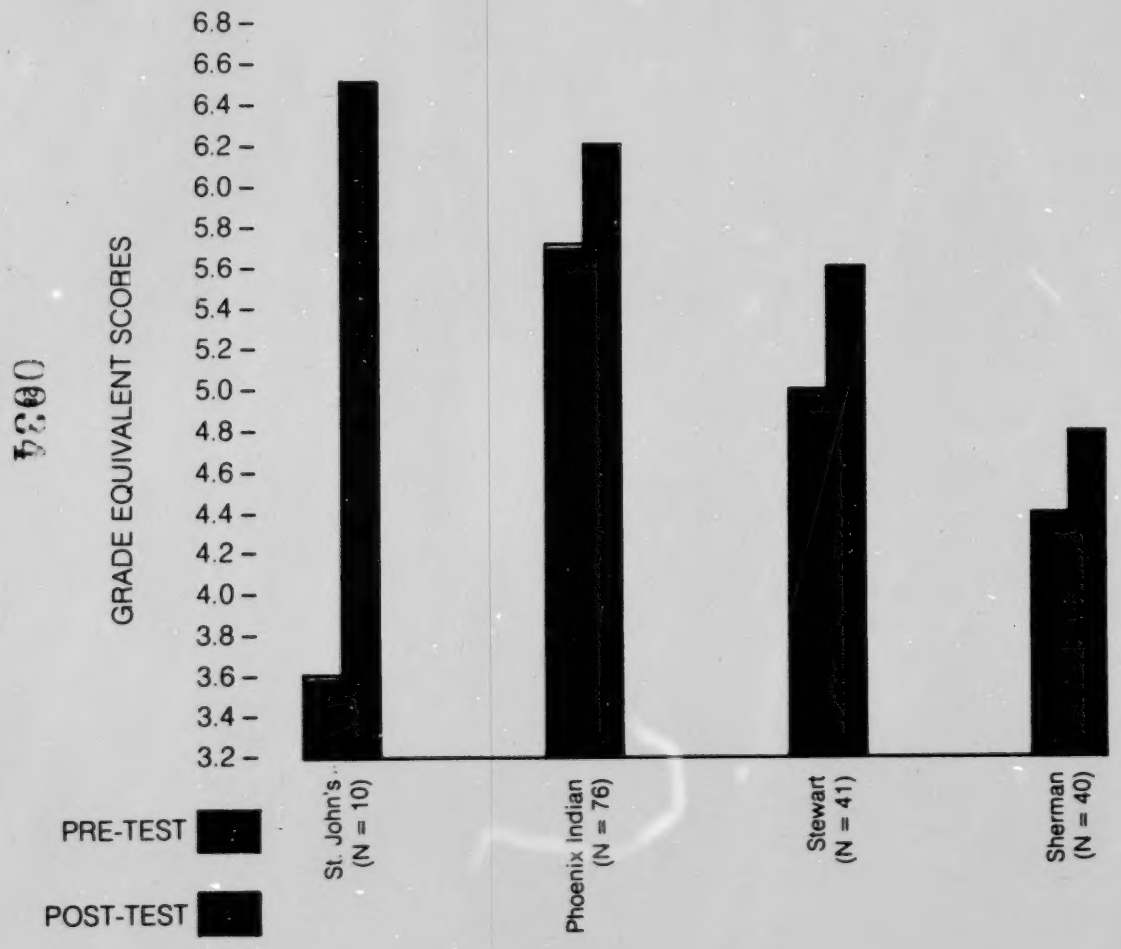


Table 18
9th Grade
Reading Component

School	Actual Gain Scores	Expected Gain Scores	Difference
St. John's Indian School	+2.9	.3	+2.2
Phoenix Indian School	+ .5	.5	0
Stewart Indian School	+ .6	.5	+ .1
Sherman Indian School	+ .4	.4	0

00035

Figure 11
Pre-Post California Achievement Test Total Reading Grade Equivalent Scores for all Schools with a 10th Grade Reading Program

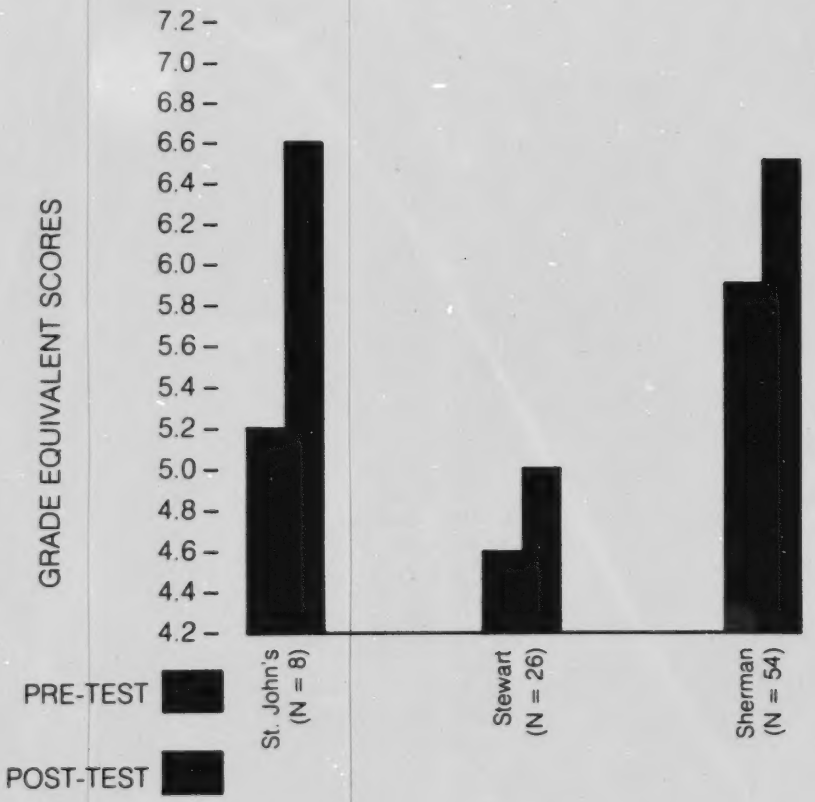
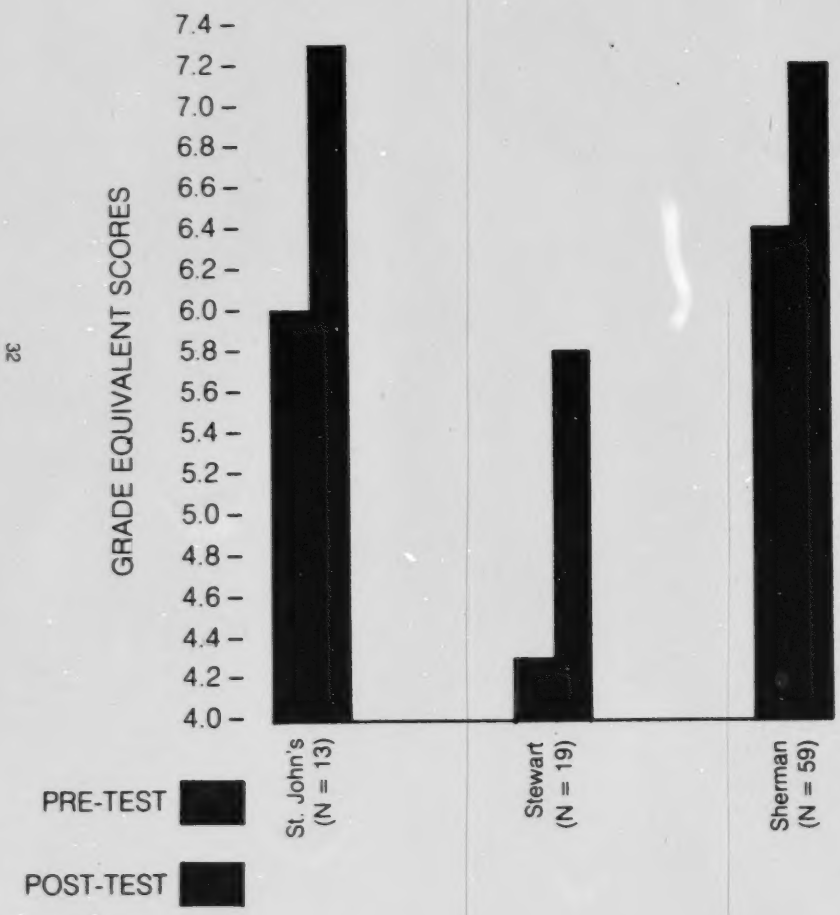


Table 19
10th Grade
Reading Component

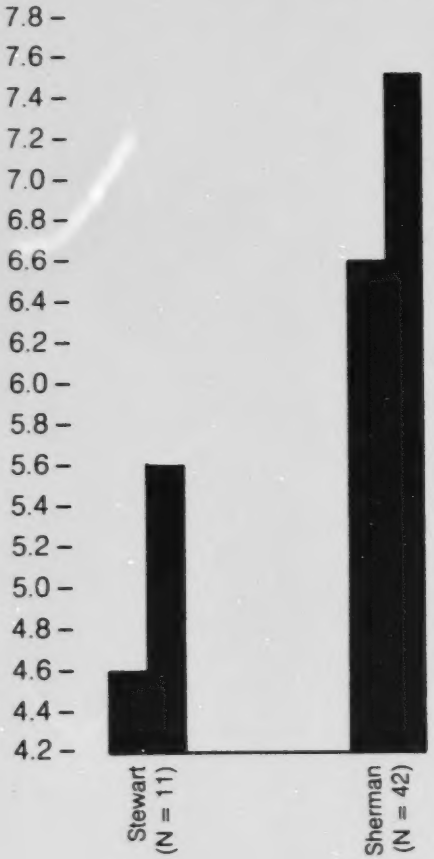
School	Actual Gain Scores	Expected Gain Scores	Difference
St. John's Indian School	+1.4	.4	+1.0
Stewart Indian School	+ .4	.4	0
Sherman Indian School	+ .6	.5	+ .1

Figure 12
Pre-Post California Achievement Test Total Reading Grade Equivalent Scores for all Schools with an 11th Grade Reading Program



0838

Figure 13
Pre-Post California Achievement Test Total Reading Grade Equivalent Scores for all Schools with a 12th Grade Reading Program



00339

Table 20
11th Grade
Reading Component

School	Actual Gain Scores	Expected Gain Scores	Difference
St. John's Indian School	+1.3	.4	+ .9
Stewart Indian School	+1.5	.3	+1.2
Sherman Indian School	+ .8	.5	+ .3

Table 21
12th Grade
Reading Component

School	Actual Gain Scores	Expected Gain Scores	Difference
Stewart Indian School	+1.0	.3	+.7
Sherman Indian School	+ .9	.5	+.4

Figure 14
Pre-Post California Achievement Test Total Language Grade Equivalent Scores for all Schools with a 2nd Grade Language Program

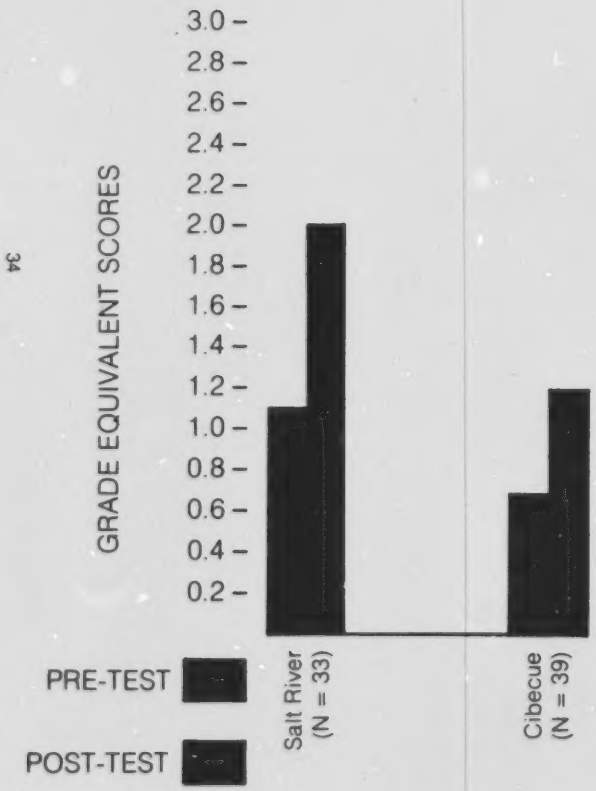


Figure 15
Pre-Post California Achievement Test Total Language Grade Equivalent Scores for all Schools with a 3rd Grade Language Program

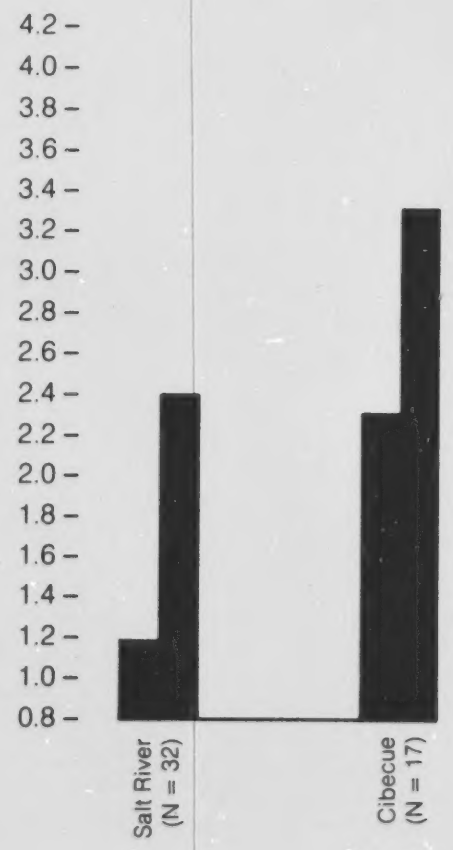


Table 22
1st Grade Language results using the Test of Basic English and presented in Stanines.

School	N	Pre Test	Post Test	Gain
Cibecue School	44	N/A	.7	N/A

Table 23
2nd Grade
Language Component

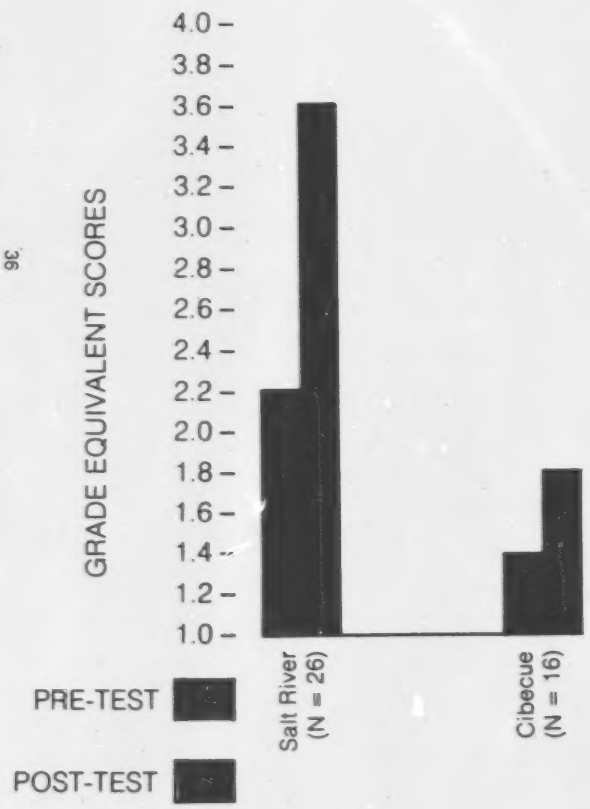
School	Actual Gain Scores	Expected Gain Scores	Difference
Salt River School	+.9	.5	+.4
Cibecue School	+.5	.3	+.2

Table 24
3rd Grade
Language Component

School	Actual Gain Scores	Expected Gain Scores	Difference
Salt River School	+1.2	.3	+.9
Cibecue School	+1.0	.6	+.4

0041

Figure 16
Pre-Post California Achievement Test Total Language Grade Equivalent Scores for all Schools with a 4th Grade Language Program



2800 0042

Figure 17
Pre-Post California Achievement Test Total Language Grade Equivalent Scores for all Schools with a 5th Grade Language Program

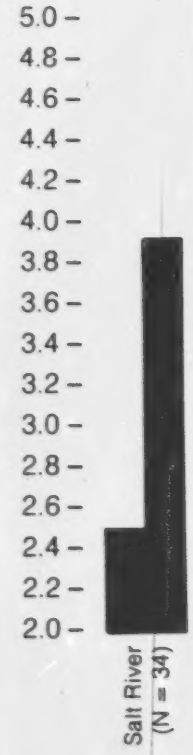


Table 25
4th Grade
Language Component

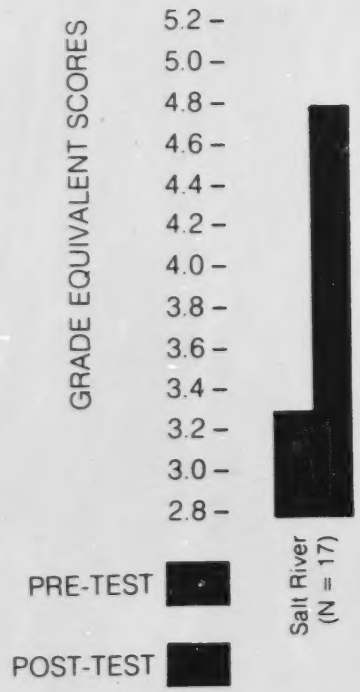
School	Actual Gain Scores	Expected Gain Scores	Difference
Salt River School	+1.4	.5	+.9
Cibecue School	+ .4	.3	+.1

Table 26
5th Grade
Language Component

School	Actual Gain Scores	Expected Gain Scores	Difference
Salt River School	+1.4	4	+1.0

00450

Figure 18
Pre-Post California Achievement Test Total Language Grade Equivalent Scores for all Schools with a 6th Grade Language Program



0044

Table 27
6th Grade
Language Component

School	Actual Gain Scores	Expected Gain Scores	Difference
Salt River School	+1.5	.5	+1.0

0045

Figure 19
Post California Achievement Test Total Math Grade Equivalent Scores for all Schools with a 1st Grade Math Program

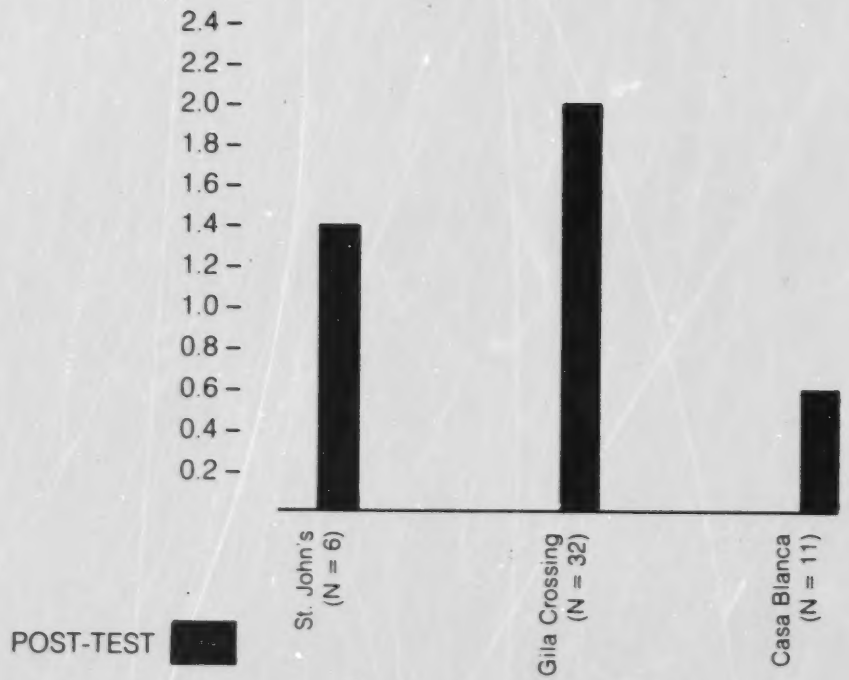


Figure 20
Pre-Post California Achievement Test Total Math Grade Equivalent Scores for all Schools with a 2nd Grade Math Program

0047

Table 28
2nd Grade
Math Component

School	Actual Gain Scores	Expected Gain Scores	Difference
St. John's Indian School	+ .3	.4	−.1
Gila Crossing Day School	+ .5	.2	+.3
Casa Blanca Day School	+1.2	.3	+.9
Kerwo School	+1.0	.6	+.4
Vaya Chin School	+ .7	.6	+.1
Santa Rosa Ranch School	+ .8	.8	0
Santa Rosa Boarding School	+ .7	.4	+.3
Salt River School	+ .7	.5	+.2

Figure 21
Pre-Post California Achievement Test Total Math Grade Equivalent Scores for all Schools with a 3rd Grade Math Program

0049

Table 29
3rd Grade
Math Component

School	Actual Gain Scores	Expected Gain Scores	Difference
St. John's Indian School	+1.1	.2	+ .9
Gila Crossing Day School	+1.0	.2	+ .8
Casa Blanca Day School	+1.1	.4	+ .7
Kerwo Day School	+1.2	.6	+ .6
Vaya Chin Day School	+1.1	.6	+ .5
Santa Rosa Ranch School	0	.6	- .6
Santa Rosa Boarding School	+1.2	.4	+ .8
Salt River School	+1.2	.2	+1.0

0050

Figure 22
Pre-Post California Achievement Test Total Math Grade Equivalent Scores for all Schools with a 4th Grade Math Program

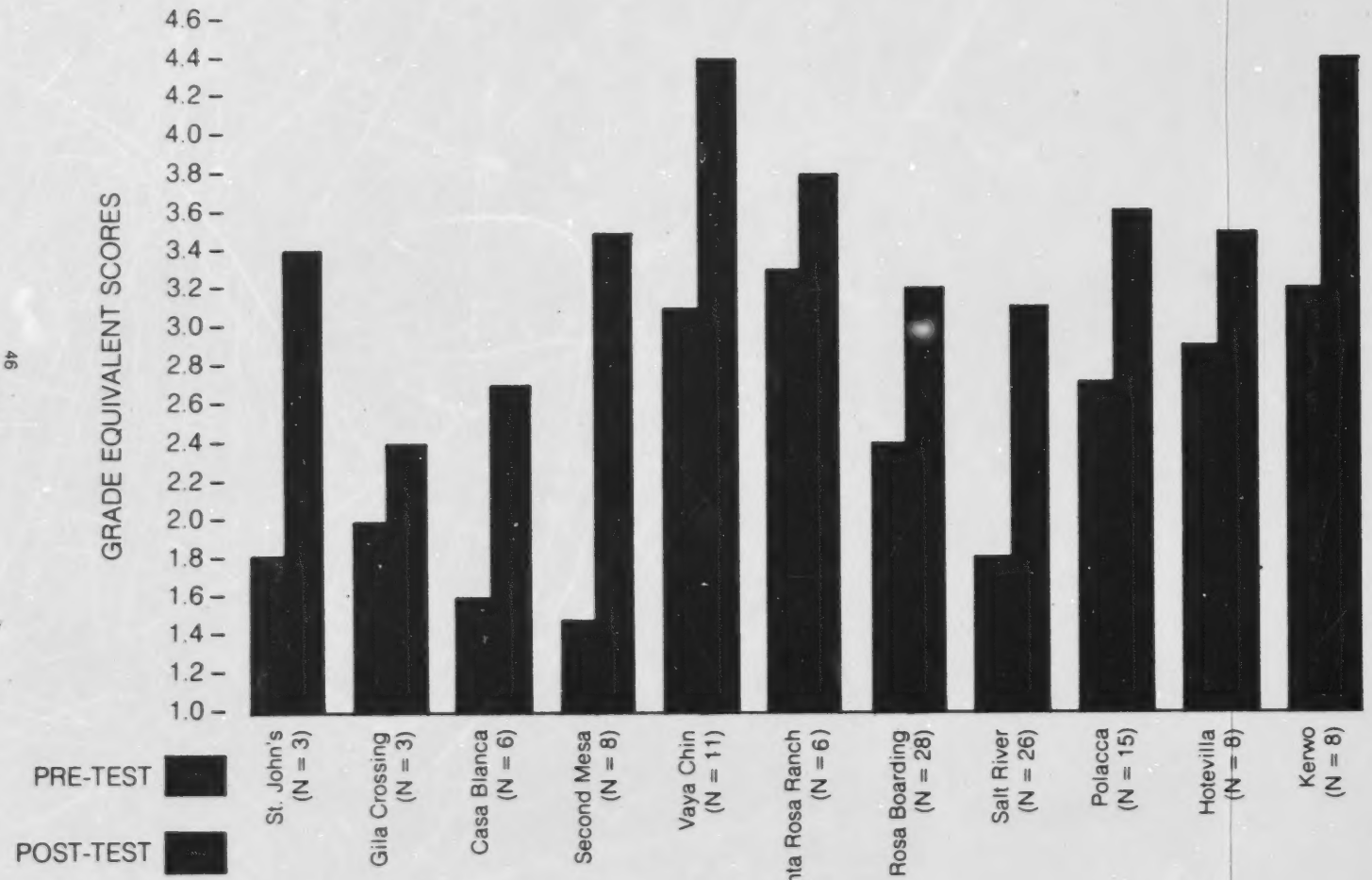


Table 30
4th Grade
Math Component

School	Actual Gain Scores	Expected Gain Scores	Difference
St. John's Indian School	+1.6	.4	+1.2
Gila Crossing Day School	+ .4	.4	0
Casa Blanca Day School	+1.1	.3	+ .8
Kerwo School	+1.2	.6	+ .6
Vaya Chin Day School	+1.3	.6	+ .7
Santa Rosa Ranch	+ .5	.6	− .1
Santa Rosa Boarding School	+ .8	.5	+ .3
Salt River School	+1.3	.4	+ .9
Second Mesa School	+2.0	.3	+1.7
Polacca School	+ .9	.6	+ .3
Hotevilla School	+ .6	.6	0

00552

Figure 23
Pre-Post California Achievement Test Total Math Grade Equivalent Scores for all Schools with a 5th Grade Math Program

0053

Table 31
5th Grade
Math Component

School	Actual Gain Scores	Expected Gain Scores	Difference
St. John's Indian School	+1.1	.5	+ .6
Gila Crossing Day School	+ .5	.3	+ .2
Santa Rosa Ranch School	+ .7	.6	+ .1
Santa Rosa Boarding School	+ .7	.5	+ .2
Salt River School	+ .8	.5	+ .3
Second Mesa School	+1.6	.4	+1.2
Polacca Day School	+ .9	.5	+ .4
Hotevilla School	+ .8	.6	+ .2

0054

Figure 24
Pre-Post California Achievement Test Total Math Grade Equivalent Scores for all Schools with a 6th Grade Math Program

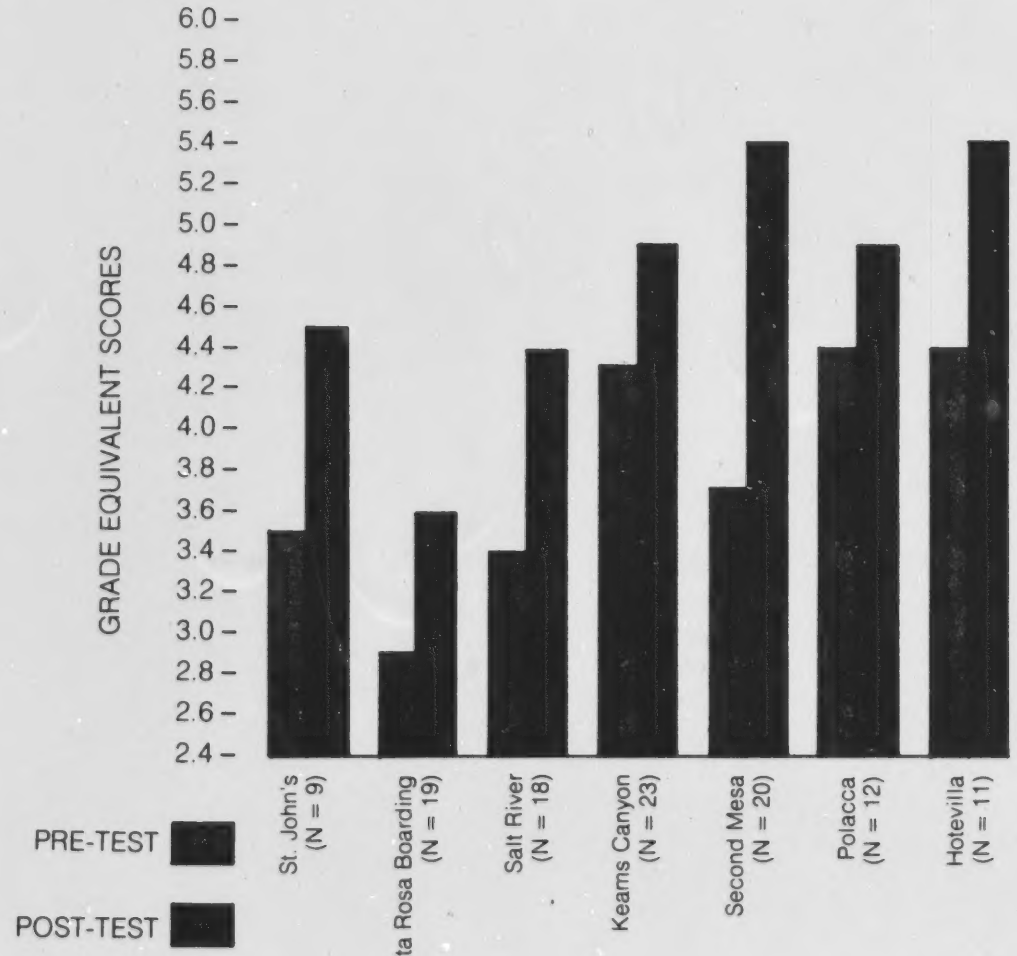


Table 32
6th Grade
Math Component

School	Actual Gain Scores	Expected Gain Scores	Difference
St. John's Indian School	+1.0	.5	+ .5
Santa Rosa Boarding School	+ .7	.4	+ .3
Salt River School	+1.0	.5	+ .5
Keams Canyon Boarding Sch.	+ .6	.6	0
Second Mesa School	+1.7	.5	+1.2
Polacca Day School	+ .5	.6	− .1
Hotevilla School	+1.0	.6	+ .4

0056

Figure 25
Pre-Post California Achievement Test Total Math Grade Equivalent Scores for all Schools with a 7th Grade Math Program

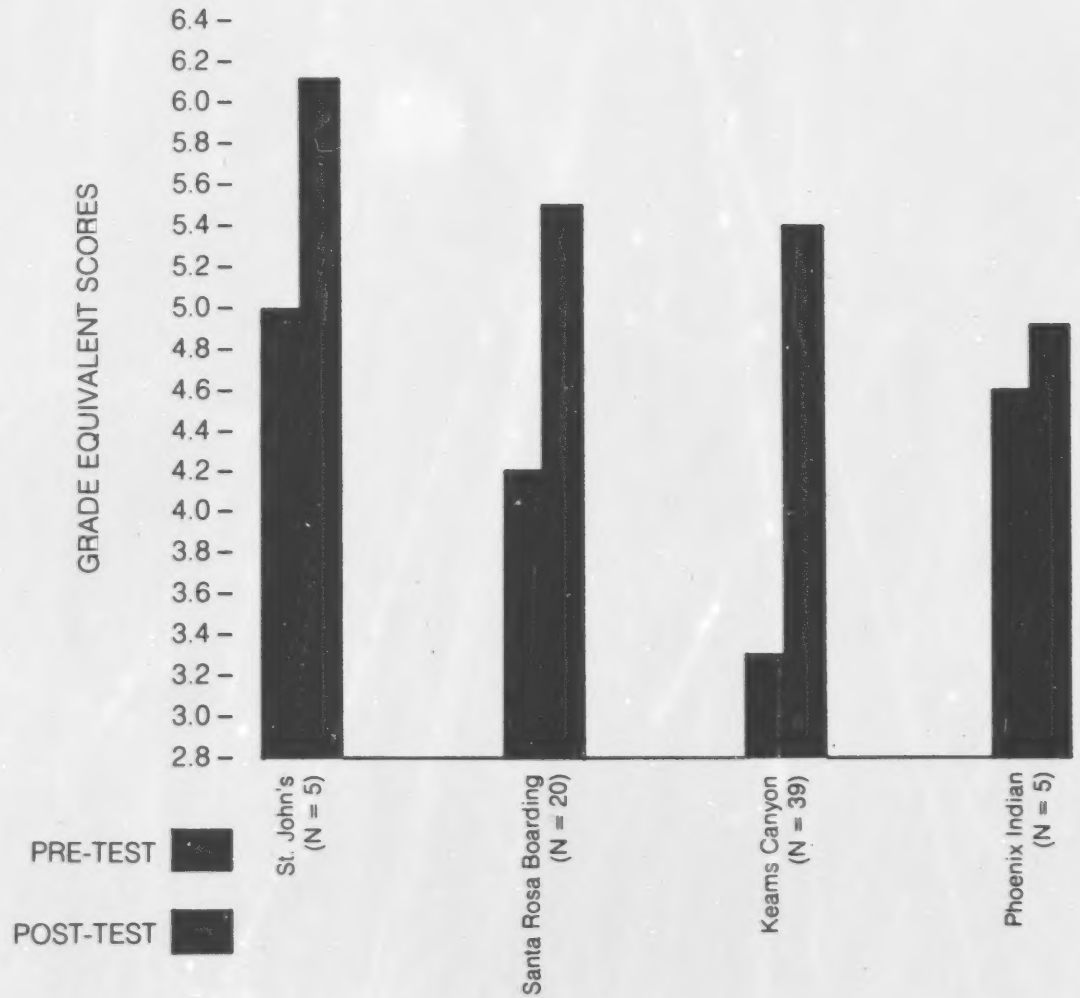


Table 33
7th Grade
Math Component

School	Actual Gain Scores	Expected Gain Scores	Difference
St. John's School	+1.1	.6	+ .5
Santa Rosa Boarding School	+1.3	.5	+ .8
Kearns Canyon Boarding School	+2.1	.4	+1.7
Phoenix Indian School	+ .3	.6	− .3

0058

Figure 26
Pre-Post California Achievement Test Total Math Grade Equivalent Scores for all Schools with a 8th Grade Math Program

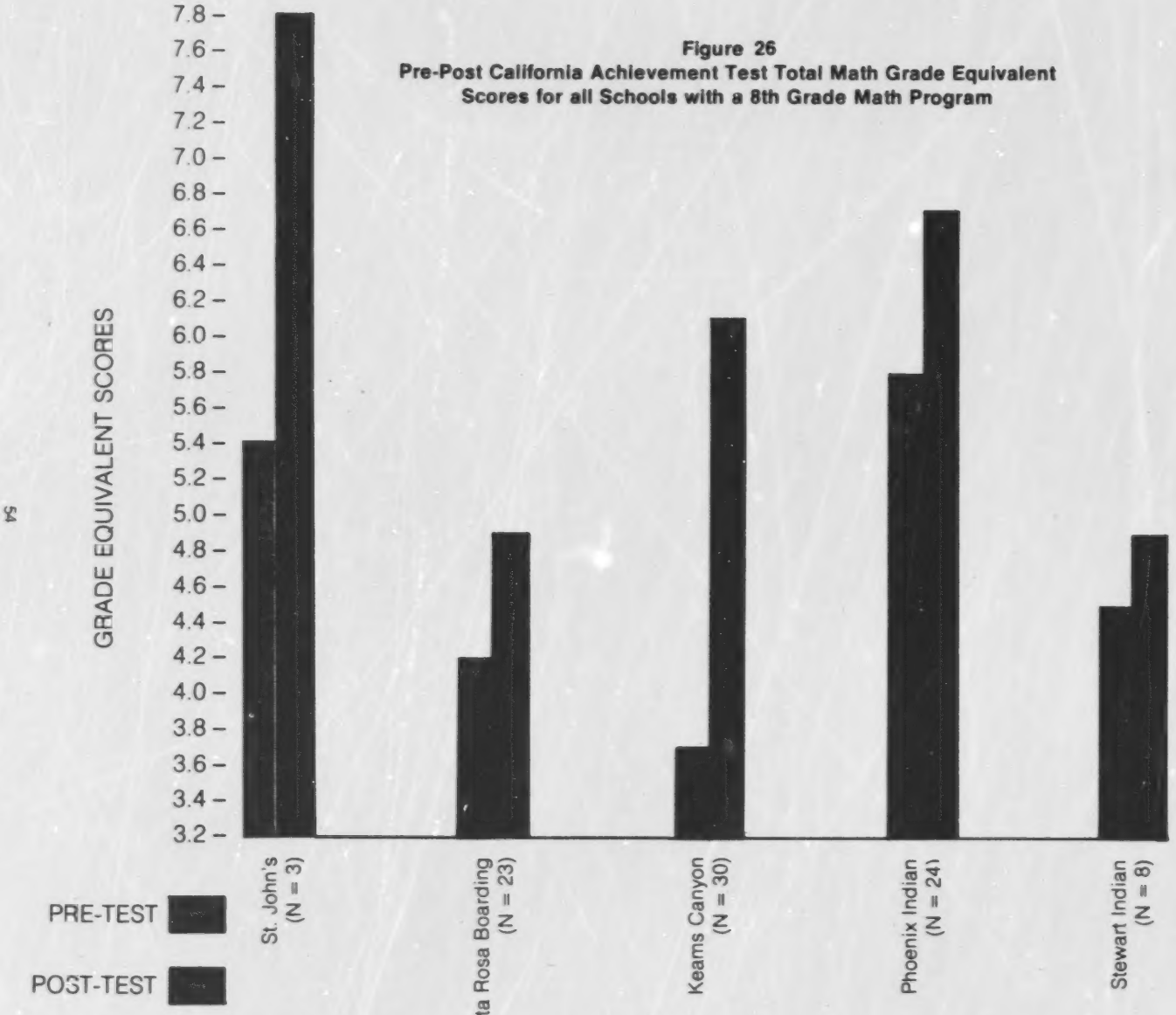
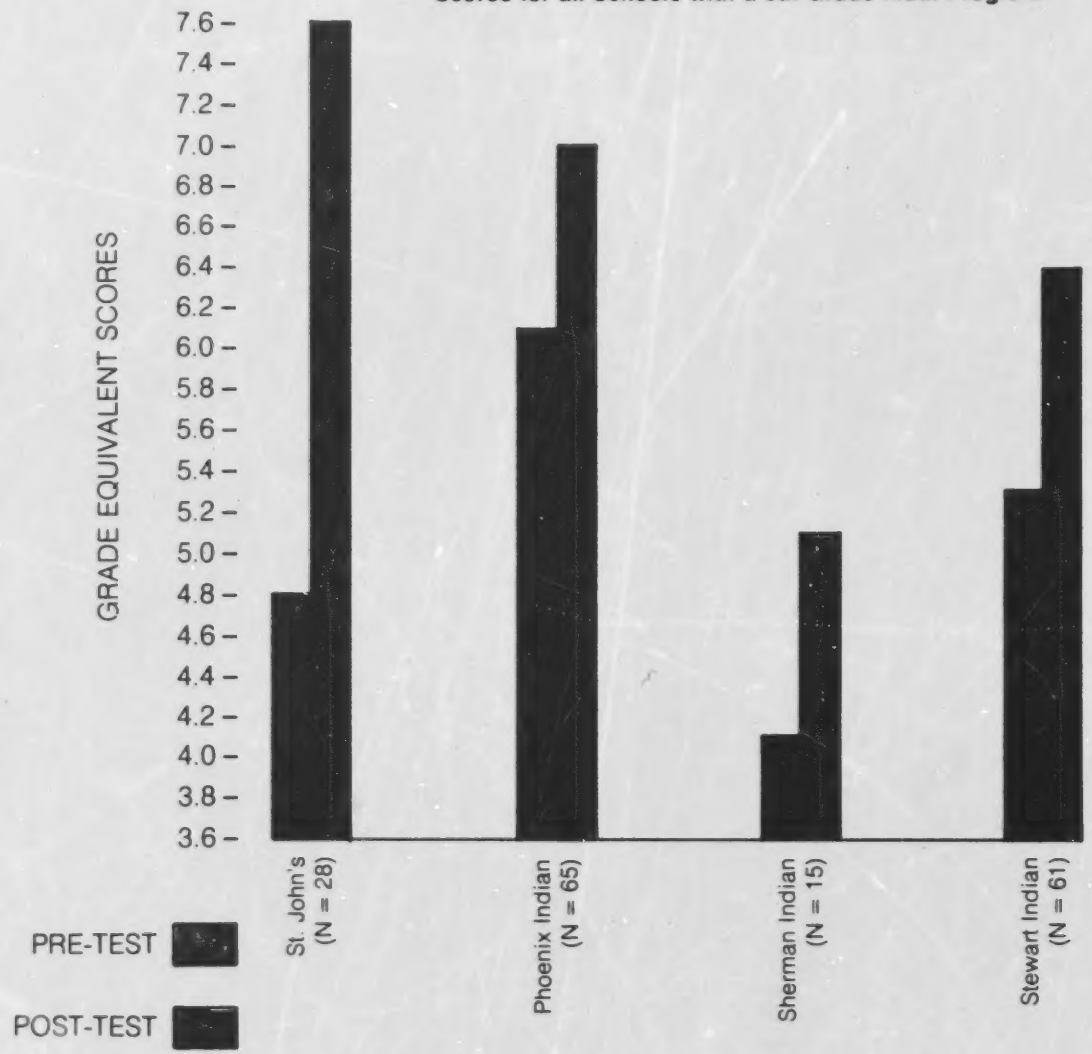


Table 34
8th Grade
Math Component

School	Actual Gain Scores	Expected Gain Scores	Difference
St. John's School	+2.4	.6	+1.8
Santa Rosa Boarding School	+ .7	.4	+ .3
Keams Canyon Boarding School	+2.4	.4	+2.0
Phoenix Indian School	+ .9	.6	+ .3
Stewart Indian School	+ .4	.5	− .1

0060

Figure 27
Pre-Post California Achievement Test Total Math Grade Equivalent Scores for all Schools with a 9th Grade Math Program



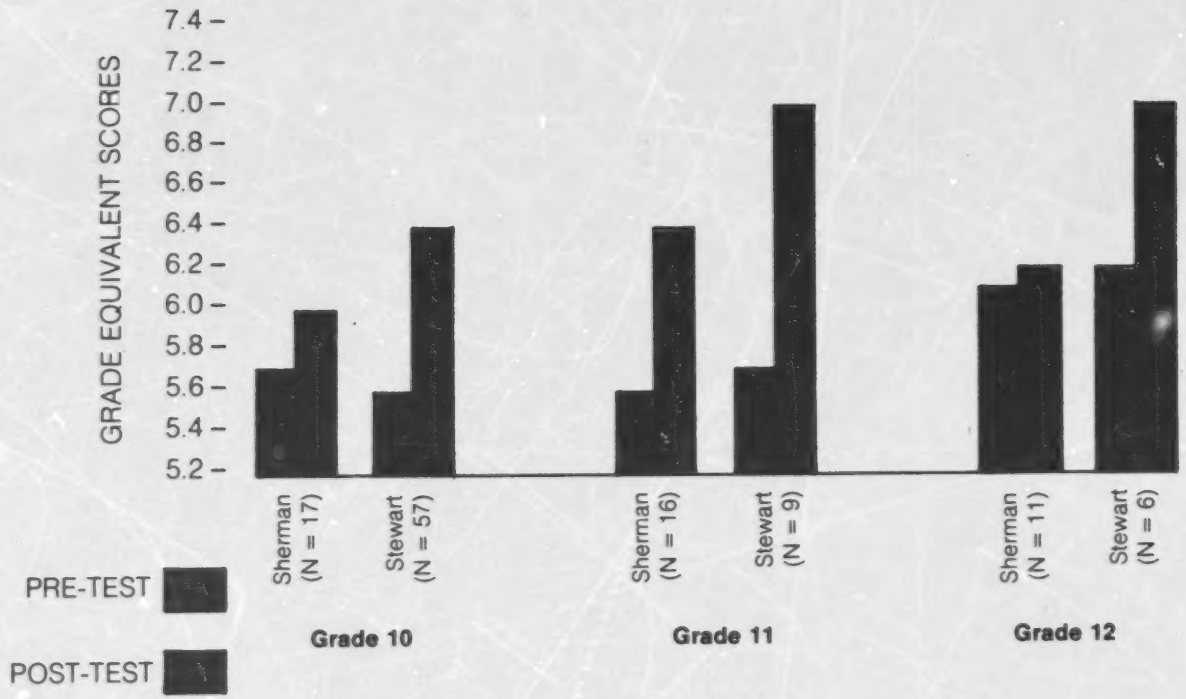
1900
96

Table 35
9th Grade
Math Component

School	Actual Gain Scores	Expected Gain Scores	Difference
St. John's School	+2.8	.4	+2.4
Phoenix Indian School	+ .9	.6	+ .3
Sherman Indian School	+1.0	.4	+ .6
Stewart Indian School	+1.1	.5	+ .6

0062

Figure 28
Pre-Post California Achievement Test Total Math Grade Equivalent Scores for Grades 10—12 at Sherman and Stewart Indian High Schools.



900
88

Table 36
10th–12th Grade
Math Component

School	Grade	Actual Gain Scores	Expected Gain Scores	Difference
Sherman High School	10	+ .3	.5	−.2
Stewart High School		+ .8	.5	+.3
Sherman High School	11	+ .8	.4	+.4
Stewart High School		+1.3	.4	+.9
Sherman High School	12	+ .1	.4	−.3
Stewart High School		+ .8	.4	+.4

Figure 29
Pre-Post Metropolitan Achievement Test Total Science Grade Equivalent Scores for All Schools with a 7th, 8th or 9th Grade Science Program

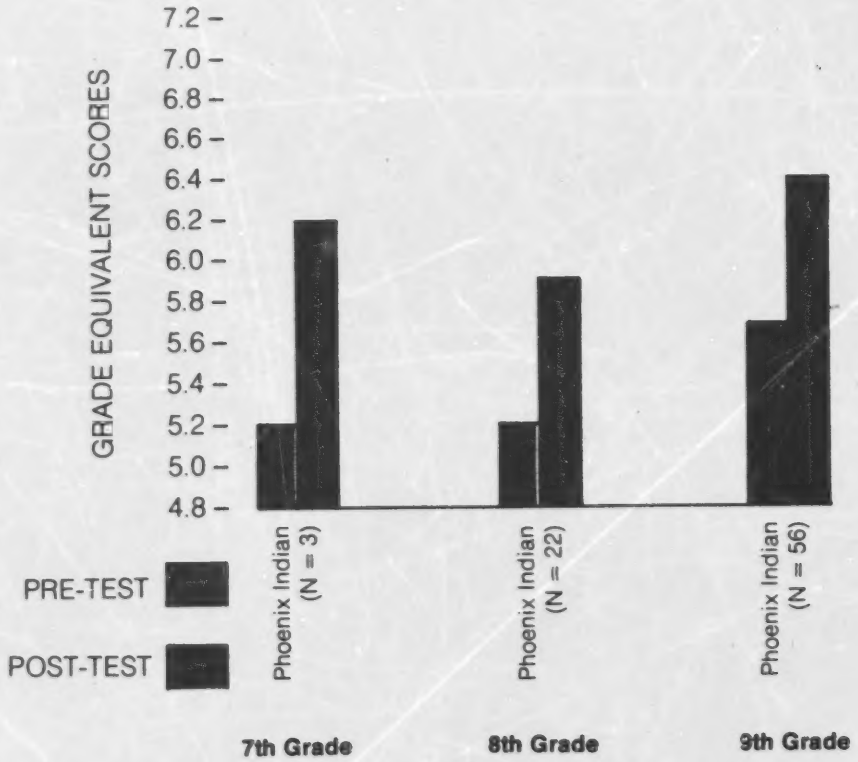


Table 37
7th, 8th and 9th Grades
Science Component

School	Grade	Actual Gain Scores	Expected Gain Scores	Difference
Phoenix Indian School	7	+1.1	.6	+.5
Phoenix Indian School	8	+ .7	.6	+.1
Phoenix Indian School	9	+ .7	.5	+.2

0066

Figure 30
Post California Achievement Test Total Battery Grade Equivalent Scores for all Schools with a 1st Grade Special Education Program

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Figure 31
Pre-Post California Achievement Test Total Battery Grade Equivalent Scores for all Schools with a 2nd Grade Special Education Program

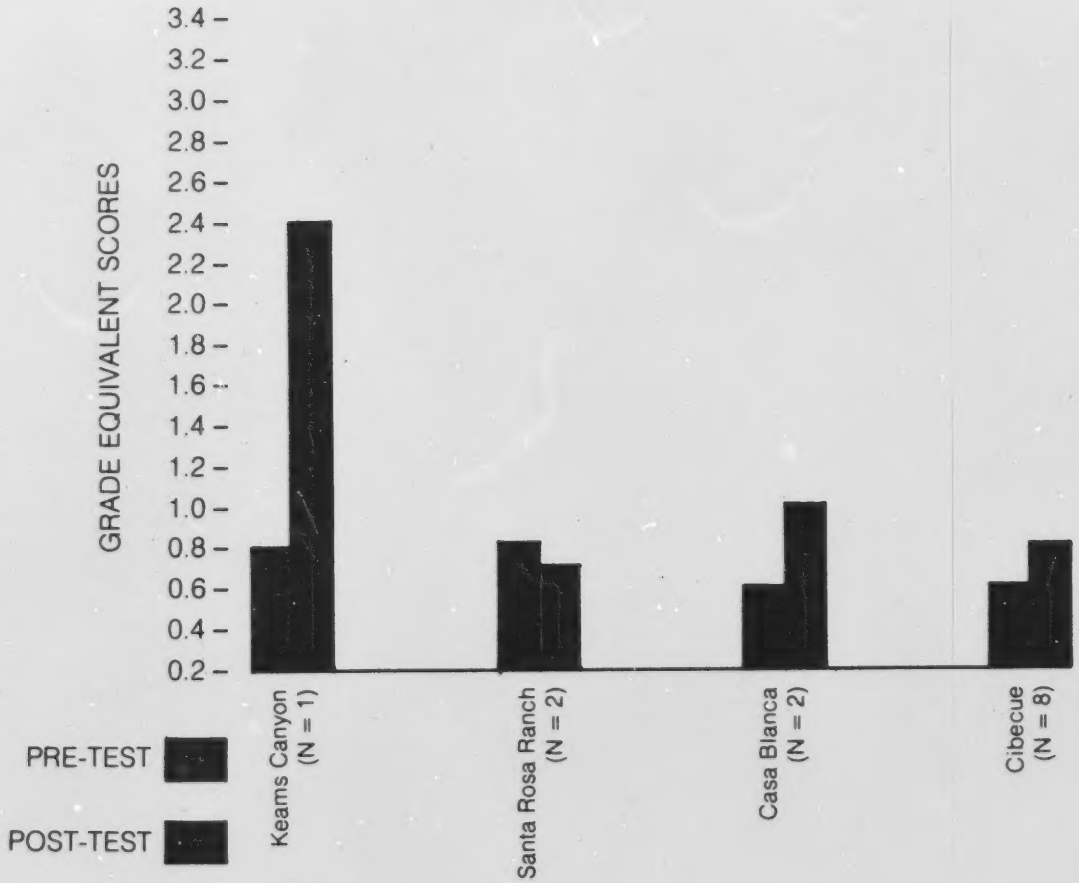

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Table 38
2nd Grade
Special Education Component

School	Actual Gain Scores	Expected Gain Scores	Difference
Keams Canyon Boarding Sch.	+.1.6	.4	+1.2
Santa Rosa Ranch School	− .1	.3	− .4
Casa Blanca School	+ .4	.2	+ .2
Cibecue School	+ .2	.2	0

Figure 32
Pre-Post California Achievement Test Total Battery Grade Equivalent Scores for all Schools with a 3rd Grade Special Education Program

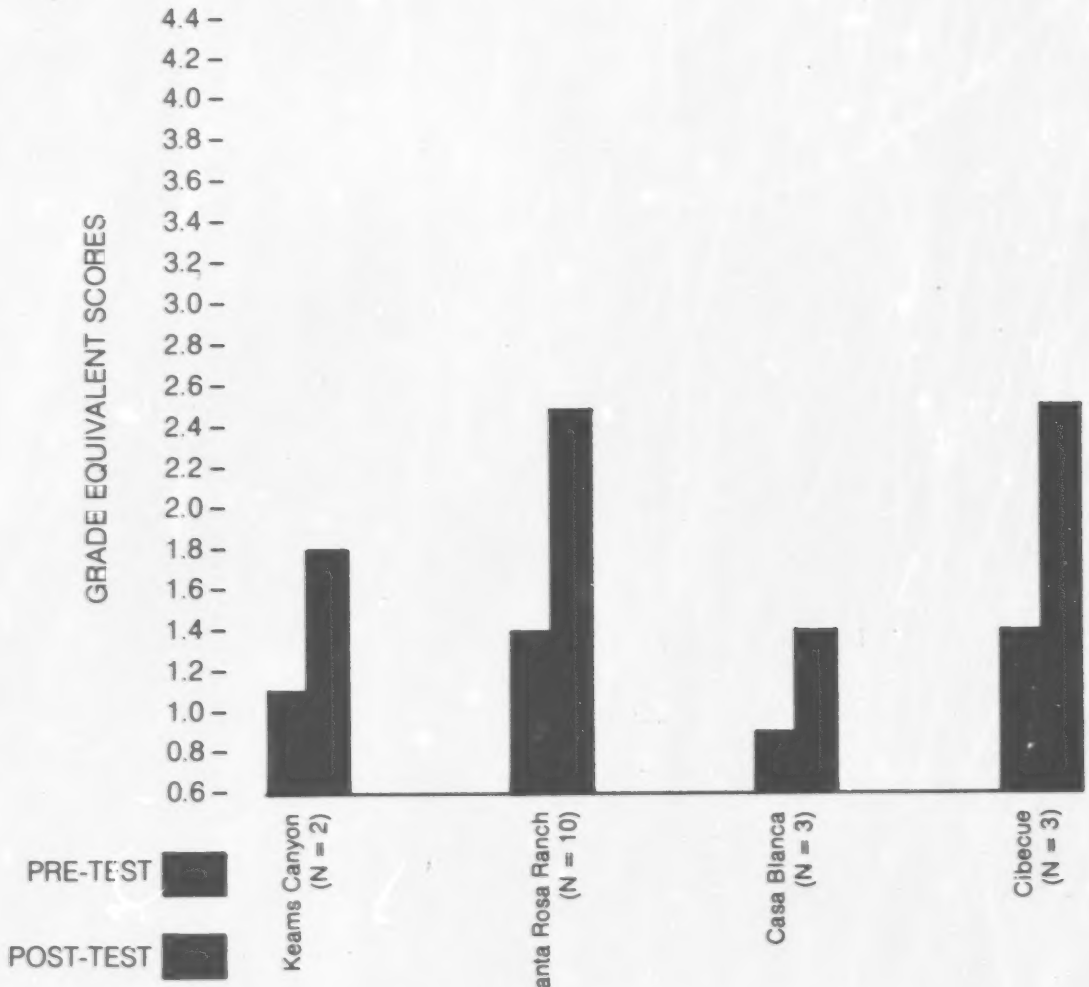

Table 39
3rd Grade
Special Education Component

School	Actual Gain Scores	Expected Gain Scores	Difference
Keams Canyon School	+ .7	.3	+.4
Santa Rosa Ranch School	+1.1	.4	+.7
Casa Blanca School	+ .5	.2	+.3
Cibecue School	+1.1	.4	+.7

Figure 33
Pre-Post California Achievement Test Total Battery Grade Equivalent Scores for all Schools with a 4th Grade Special Education Program

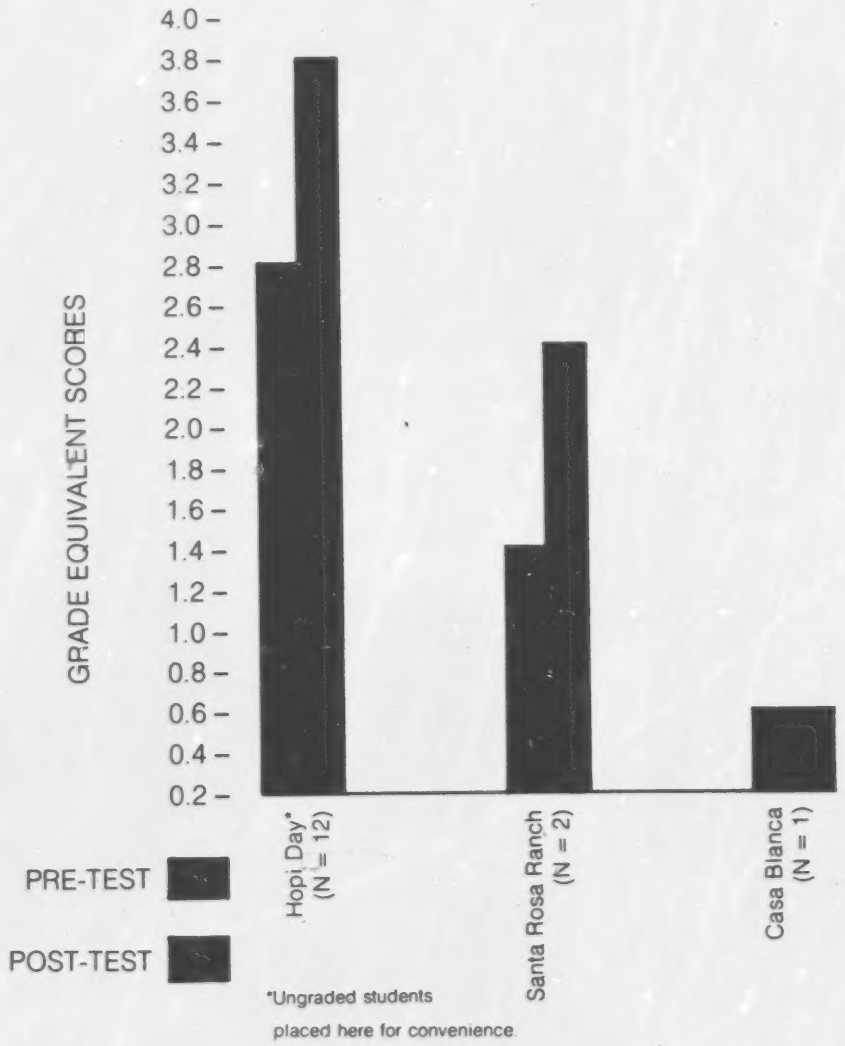

Table 40
4th Grade
Special Education Component

School	Actual Gain Scores	Expected Gain Scores	Difference
Hopi Day* School	+1.0	.6	+.3
Santa Rosa Ranch School	+1.0	.3	+.7
Casa Blanca School	0	.2	−.2

*Ungraded students placed here for convenience.

Figure 34
Pre-Post California Achievement Test Total Battery Grade Equivalent Scores for all Schools with a 5th Grade Special Education Program

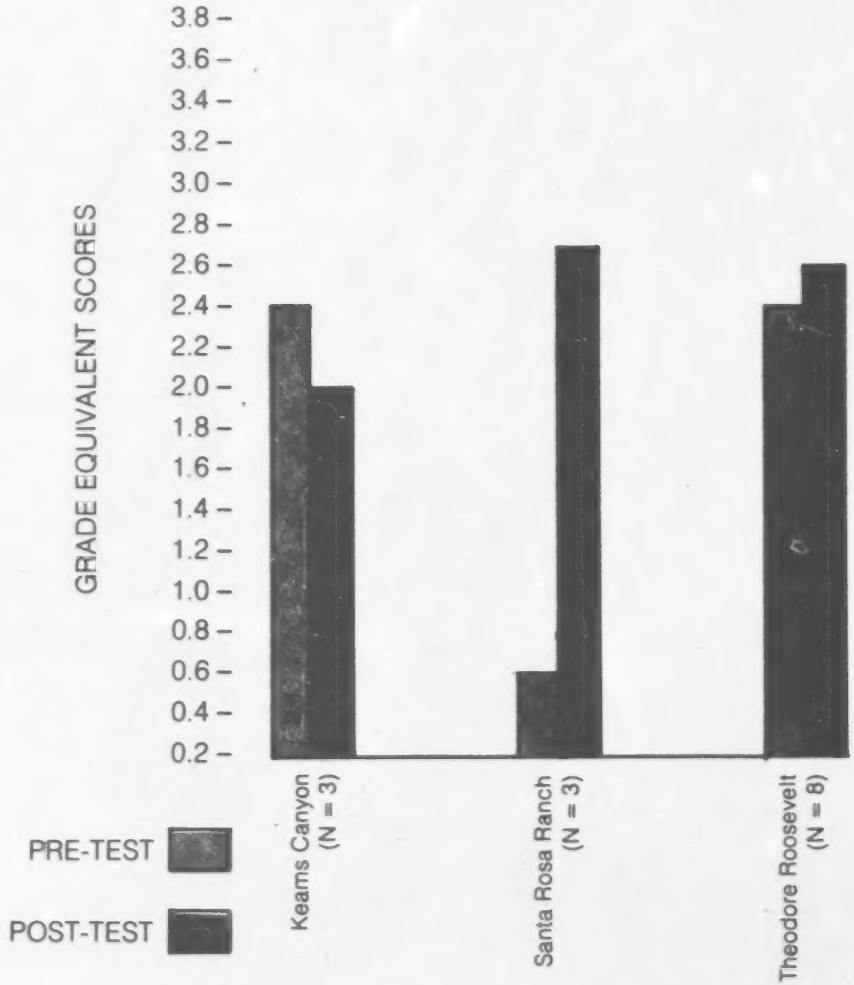

Table 41
5th Grade
Special Education Component

School	Actual Gain Scores	Expected Gain Scores	Difference
Keams Canyon School	– .4	.4	– .8
Santa Rosa Ranch School	+2.1	.1	+2.0
Theodore Roosevelt School	+ .2	.4	– .2

Figure 35
Pre-Post California Achievement Test Total Battery Grade Equivalent Scores for all Schools with a 6th Grade Special Education Program

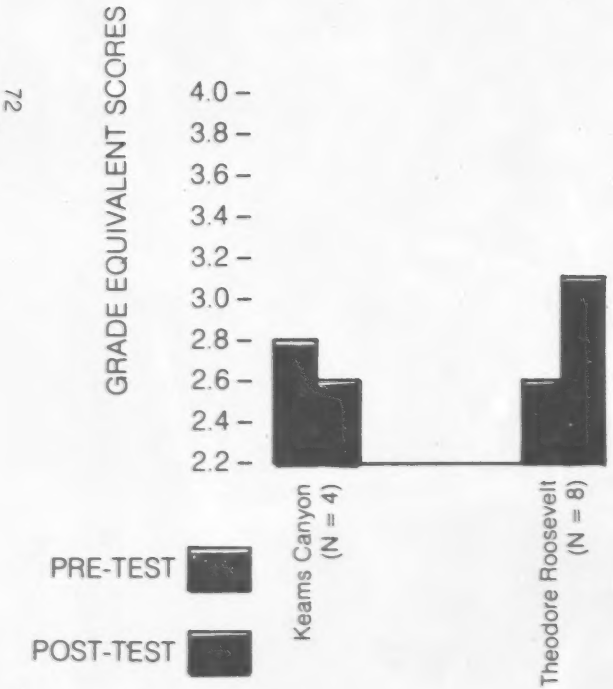

Figure 36
Pre-Post California Achievement Test Total Battery Grade Equivalent Scores for all Schools with a 7th Grade Special Education Program

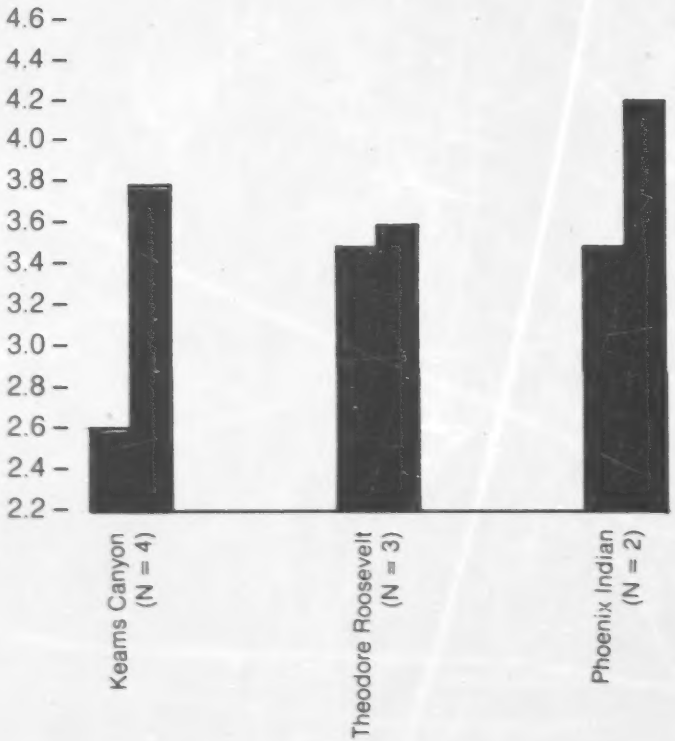

Table 42
6th Grade
Special Education Component

School	Actual Gain Scores	Expected Gain Scores	Difference
Keams Canyon School	−.2	.4	−.6
Theodore Roosevelt School	+.5	.3	+.2

0071

Table 43
7th Grade
Special Education Component

School	Actual Gain Scores	Expected Gain Scores	Difference
Keams Canyon School	+1.2	.3	+.9
Theodore Roosevelt School	+ .1	.4	−.3
Phoenix Indian School	+ .7	.4	+.3

Figure 37
Pre-Post California Achievement Test Total Battery Grade Equivalent Scores for all Schools with an 8th Grade Special Education Program

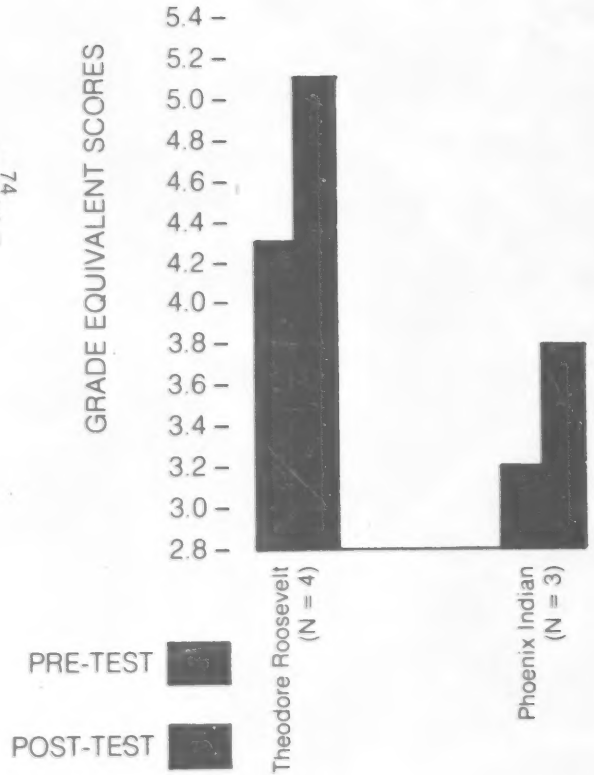

Figure 38
Pre-Post California Achievement Test Total Battery Grade Equivalent Scores for all Schools with a 9th Grade Special Education Program

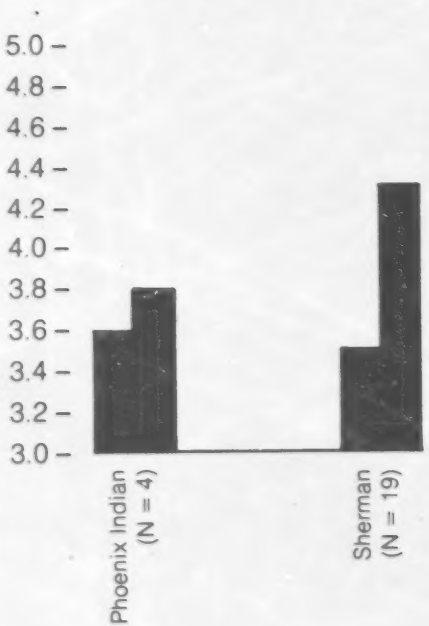

Table 44
8th Grade
Special Education Component

School	Actual Gain Scores	Expected Gain Scores	Difference
Theodore Roosevelt School	+.8	.4	+.4
Phoenix Indian School	+.6	.3	+.3

Table 45
9th Grade
Special Education Component

School	Actual Gain Scores	Expected Gain Scores	Difference
Phoenix Indian School	+.2	.3	−.1
Sherman Indian School	+.8	.3	+.5

0800

Figure 39
Pre-Post California Achievement Test Total Battery Grade Equivalent Scores for all Schools with a 10th Grade Special Education Program

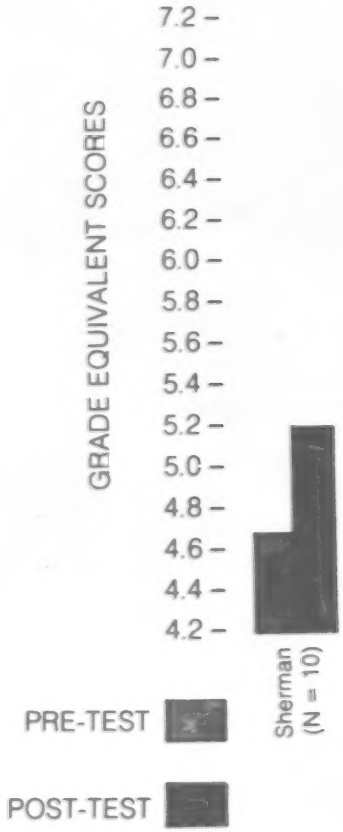

Figure 40
Pre-Post California Achievement Test Total Battery Grade Equivalent Scores for all Schools with an 11th Grade Special Education Program

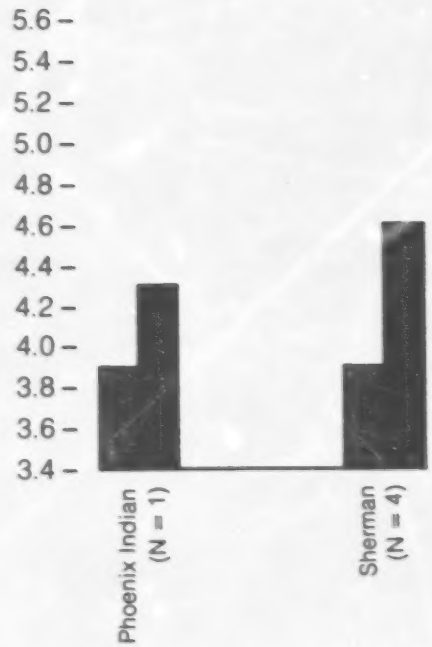

Table 46
10th Grade
Special Education Component

School	Actual Gain Scores	Expected Gain Scores	Difference
Sherman Indian School	+.5	.4	+.1

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Table 47
11th Grade
Special Education Component

School	Actual Gain Scores	Expected Gain Scores	Difference
Phoenix Indian School	+.4	.3	+.1
Sherman Indian School	+.7	.3	+.4

Figure 41
Pre-Post California Achievement Test Total Battery Grade Equivalent Scores for all Schools with a 12th Grade Special Education Program

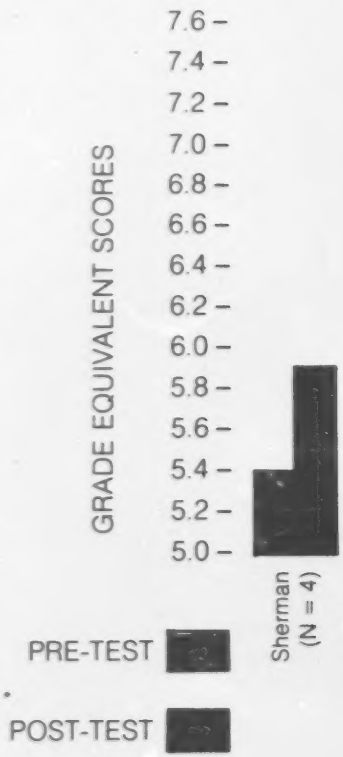

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Table 48
12th Grade
Special Education Component

School	Actual Gain Scores	Expected Gain Scores	Difference
Sherman Indian School	+.5	.4	+.1

Table 49
Pre-Post California Achievement Test Total Reading and Total Mathematics Grade Equivalent Scores for the Stewart High School Special Education Component

School	Grade	N	Pretest	Post-Test	Actual Gain Scores	Expected Gain Scores	Difference
Stewart School	9	5	4.1	3.5	+ .6	.4	+ 2
	10	5	5.2	6.7	+1.5	.4	+1.1
Total Reading Scores	11	5	4.0	5.7	+1.7	.3	+1.4
	12	6	4.0	5.1	+1.1	.2	+ .7
Stewart School	9	5	4.4	4.6	+ .2	.4	− .2
	10	5	5.0	5.4	+ .4	.4	0
Total Math Scores	11	4	4.9	6.4	+1.5	.3	+1.2
	12	6	3.9	4.3	+ .4	.2	+ .2

0084

CONCLUSIONS

The data presented in this report clearly show that most of the Title I projects were highly successful in FY 1974. This is documented in the Phoenix Area consolidated schools report where students in eight of the 11 grades gained at or above the national average in reading and math. In addition, ten of the 11 grades of Special Education students had gains higher than expected without Title I and in two grades the gains were higher than the national average for non-special education students.

Reading

The majority of students in almost every school had reading gain scores that exceeded their average performance in the past.

Three schools (Vaya Chin, Hopi Day, and Second Mesa) reported gain scores that met or exceeded the national average in every grade. In addition students in Keams Canyon grade 8 and St. John's grade 9 showed gains of more than 2.5 years.

In contrast four schools had students in one grade exhibiting gains less than they had in prior years. Additionally two schools, Gila Crossing and Keams Canyon, had students who did not gain at a satisfactory level in two grades.

Mathematics

The results for the mathematics components were spectacular. There were three schools in which the students met or exceeded the national average in every grade. These schools were Kerwo, Casa Blanca, and Second Mesa. In addition, in eight schools students gained at or exceeded the national average in every grade but one. Several schools reported student gain scores of double or more the national average; these were Second Mesa grade 4, Keams Canyon grade 7, and St. John's grades 8 and 9.

In contrast, several schools reported unexpectedly small gains in mathematics. Santa Rosa Ranch and Sherman Indian High School had gains less than expected in two grades.

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0085

Language

There were two schools with language components. One of these, Salt River, reported gains exceeding the national average in all five grades in which pre-post tests were given. The other school, Cibecue, reported gains in grade 3 which exceeded the national average and in grades 2 and 4 that exceeded expected gains.

Special Education

The results for the Special Education components were mixed. Several schools reported outstanding results in some grades and rather disappointing results in other grades. For example, Santa Rosa Ranch reported gains that exceeded the national average for students in grades 3–5, however, students in grade 2 showed a one month loss for the year. The ungraded students in the Hopi Day/Second Mesa Special Education component showed gains of one full year in only eight months. Keams Canyon reported losses for students in grades 5 and 6 and substantial gains for students in grade 7. Students at Sherman Indian High School showed gains higher than their previous average performance in every grade.

Stewart Indian High School reported subtest scores in reading and math for their Special Education component. Here again results were mixed. In reading students in all four grades exceeded what they gained in prior years and in three grades (10–12) they gained at higher than the national average. In mathematics the students had satisfactory gains in grade 12, spectacular gains in grade 11, and less than satisfactory performance in grade 9.

Science

The results for Phoenix Indian High School students in science were excellent in grades 7, 8 and 9. The students in grade 7 gained at higher than the national average.

0086

DEFINITION OF TERMS

There are several terms used in the manuscript that might not immediately be clear without some clarification.

N = the number of students who took both the pre and post-test and thus comprise the total number of students included in the test results.

Expected Gain: For purposes of this report, expected gain refers to the gain in grade equivalent score that would be expected if the students did not receive Title I services. The value was computed by dividing the students pre-test score by the number of years in school +1. This yearly expected gain was then adjusted to an 8 month school year by multiplying the expected gain by 4/5. Thus a student beginning the second grade with a pre-test score of 1.6 would have an expected growth of .6 in grade equivalents. While it is recognized that this does not take into account the true gain/loss factor over the summer it was the most accurate figure that could be derived given the limitations of the data.

Test Dates: Dates of administration of the pre-tests were the last 2 weeks in September and of the post-test were the first 2 weeks in May. Thus the school year approximates 8 months rather than 9 months for purposes of this report.

0087

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